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ABSTRACT

Through lottery funding, all public schools in Georgia received satellite dish equipment. This study is an assessment of the use of the satellite dish equipment by library media specialists in the DeKalb County School System for taping PeachStar (the satellite channel of Georgia Public Broadcasting) programming. The purpose was four-fold: (1) to determine the frequency of use and the tasks involved; (2) to ascertain what factors facilitated or impeded utilization; (3) to learn which programs were being taped; and (4) to determine if demographic factors influenced use. The 138 library media specialists of the DeKalb County Public Schools, DeKalb County, Georgia served as the population for this study. A six-page survey instrument was designed and distributed asking library media specialists to rate their proficiency at using the satellite dish technology, the frequency of taping, the tasks involved, the series taped, and the factors that facilitated or impeded utilization of PeachStar programming. Results indicated that most DeKalb library media specialists were using the satellite technology provided by the state to tape PeachStar programming. Usage was higher in the elementary schools than the secondary schools in terms of the frequency of taping and number of series taped. (AEF)

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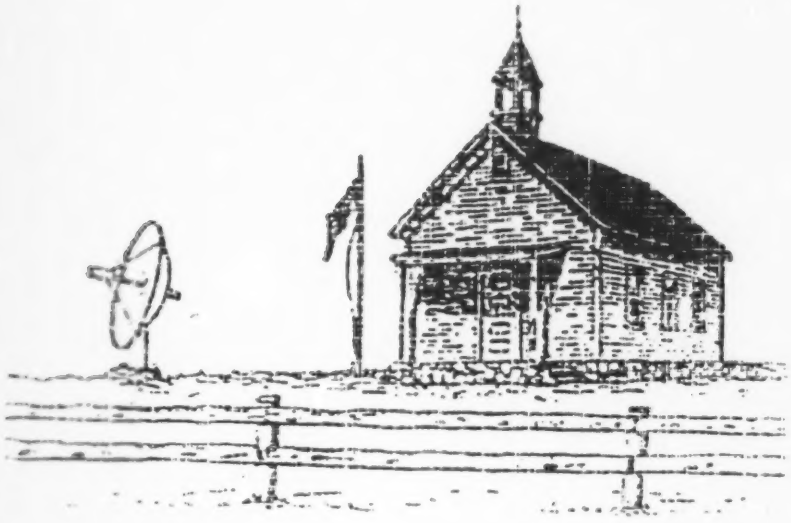

by Betsy L. Razza

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PROSTOCS

Utilization of Satellite Dish Technology and Its Application in Taping PeachStar Programming: A Survey of Library Media Specialists

by Betsy L. Razza

A Scholarly Study

Presented in Partial Fulfillment of Requirements
for the Degree of Specialist in Education in
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Atlanta, Georgia
1998

ABSTRACT

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Purpose

Through lottery funding, all public schools in Georgia received satellite dish equipment. This study was an assessment of the use of the satellite dish equipment by library media specialists in the DeKalb County School System for taping PeachStar programming. The purpose was four-fold: (1) to determine the frequency of use and the tasks involved; (2) to ascertain what factors facilitated or impeded utilization; (3) to learn which programs were being taped; and (4) to determine if demographic factors influenced use.

Methods and Procedures

The 138 library media specialists of the DeKalb County Public Schools, DeKalb County, Georgia served as the population for this study. A six-page survey instrument was designed and distributed, asking library media specialists to rate their proficiency at using the satellite dish technology, the frequency of taping, the tasks involved, the series taped, and the factors that facilitated or impeded utilization of PeachStar programming. Frequencies and percentages were used to report the results.

Results

Responses were received from 80% of the DeKalb library media specialists. Major findings included:

1. More than half of the DeKalb library media specialists were taping PeachStar programming once a week or more, with usage highest in the elementary schools.

2. Logistical factors impeding use of PeachStar programming were numerous. They included lack of time to tape, minimal teacher usage, insufficient supply of blank videotapes, proficiency in using the equipment, and copyright limitations. Factors that might have facilitated more taping included having more programs with three years rights or more, a greater supply of blank video tapes, more time to videotape, greater proficiency at taping, and more TV/VCRs for viewing tapes.

3. Programs that were taped the most were elementary series. The exceptions were series that were being used in both elementary and middle schools. Most teachers preferred short programs running 60 minutes or less and the likelihood of taping programming dropped when usage rights were less than three years.

4. Demographic analysis showed that elementary media specialists taped more programs and utilized the satellite dish equipment more on a daily and weekly basis than secondary media specialists. Although secondary media specialists taped less frequently, they were more apt to catalog taped programs, providing access through the automated card catalog network.

Conclusions

The results of the survey indicated that most DeKalb library media specialists were using the satellite technology provided by the state of Georgia to tape PeachStar programming. Usage was found to be higher in the elementary schools than the secondary schools in terms of the frequency of taping and the number of series taped. Even though the data showed that the majority of DeKalb library media specialists were taping PeachStar programs once a week or more, lack of time to tape and minimal teacher usage were perceived as the greatest barriers to taping. Further study is needed to determine ways to increase usage in the secondary schools and to determine if there is a discrepancy between the theoretical role of the library media specialist and their actual practice as facilitators in promoting and coordinating the usage of PeachStar programming.

List of Tables

Table

1 Breakdown of Library Media Specialists in the DeKalb County School System 38
2 Use of PeachStar Programming 45
3 Practices Used to Inform Teachers of PeachStar Programming 46
3.1 "Other" Write-In Practices Used to Inform Teachers of PeachStar Programming 46
4 How Teachers Select Programming 47
5 Practice Used for Cataloging and Circulating Videotaped Programs 48
6 Possible Barriers to Taping Programs off the Satellite Dish 50
7 Factors that would Facilitate More Taping off the Satellite Dish 51
8 Importance of Factors in Deciding to Videotape 52
9 Likelihood of Taping Programs with Various Taping Rights 53
10 Series Taped on a Regular Basis 54
10.1 "Other" Series Listed by Respondents 55
11 Level of Education Attained by Respondents 56
12 Number of Clerical Staff Members in the Media Center 56
12.1 Number of Library Media Specialists in the Media Center 56
13 Size of Schools Reporting 56
14 Grade Level of Schools Reporting 57
15 Frequency of Videotaping by Elementary and Secondary Schools 57
16 Average Number of Series Taped by Elementary and Secondary Schools 58
17 Relationship Between Number of Ways Used to Inform Teachers and Size of Schools 59
18 Mean Number of Barriers Endorsed by Elementary and Secondary Schools 59
19 Number of Clerks Staffed by Grade Levels 60
20 Relationship of Level of Proficiency with Degree Attained by Library Media Specialists 60
21 Cataloging and Circulation Practices Used by Elementary and Secondary Schools 61

Chapter 1

INTRODUCTION

Overview

Educators and legislators have increasingly turned to the potential of technology to enhance education and to expand the variety of instructional materials. School library media programs have also expanded the technologies that they use for providing instructional materials and access to information. Moving away from mainly print collections, media centers have moved towards the use of electronic databases, online resources, computerized card catalogs, and distance education. While the concept of distance learning has been used to cover a variety of educational experiences, it is in the area of telecommunications that schools and media centers have seen perhaps the most notable advances as the use of television, cable television and satellites has become more sophisticated and widespread.

In most states, the local Public Broadcasting System network offers a variety of educational programming specifically designed for grades K - 12. Through the use of television, cable television and satellites, Public Broadcasting Systems are able to offer programming that ranges from Sesame Street, to the study of Japanese, to staff development. Often, Public Broadcasting Systems work with a state agency, university, or local television station to provide educational programming as well as instructional guides and support materials for educators. In addition,

Public Broadcasting Systems usually play an important role as a resource provider for their state, producing programming that is specific to the local history, geography, and culture of the particular state they serve.

In Georgia, televised instructional programming is offered to schools through PeachStar, the satellite channel of Georgia Public Broadcasting. Schools receive programming schedules and information from PeachStar Education Services on a monthly basis in order to facilitate the usage of educational programming broadcast through PeachStar. Library media specialists serve as the instructional television (ITV) resource people for schools in Georgia. They are responsible for introducing ITV to teachers, taping the educational programming on request, and making it available to faculty. As the liaison between teachers and educational programming, their role plays a significant part in the usage of instructional television programming.

The utilization of ITV has meant students in urban and remote areas can have access to programming or classes they may not otherwise have experienced. As is stated on the subtitle of the Online Journal of Distance Education and Communication: "In the industrial age, we go to school. In the information age, school can come to us. This is the message implicit in the media and movement of distance education" (Schiller, 1993).

Statement of the Problem

Integral to the use of the satellite dish network is the role of the media specialist as a liaison between the programming offered by PeachStar and the teachers. The purpose of this study is twofold: to determine how frequently media specialists are using the satellite dish technology

provided by the state for videotaping educational programs; and to determine what needs they might face that affects the utilization of the satellite network. In this study, the following are to be investigated:

1. What is the frequency of satellite dish usage and what tasks do media specialists perform in the overall usage of the satellite dish?
2. What factors facilitate or impede utilization of the satellite dish?
3. What educational programs are being videotaped by media specialists?
4. Do demographic factors relate to the taping of PeachStar programming?

Significance of the Study

This study was an educational assessment of utilization practices by media specialists in the DeKalb County school system. It was designed to shed light on factors that might facilitate or impede more effective or extensive use of the satellite programming in schools. Copyright issues, programming length, selection practices, and specific program utilization might assist producers responsible for making decisions concerning future programming.

When technology is freely given to schools, it often carries hidden or ongoing costs. Supply and equipment issues might highlight the need for ongoing funding to school administrators and state officials. Media specialists were asked to rate how proficient they felt using the satellite dish equipment. This information may assist central offices in determining if there is a felt need for training. The results of this study may offer insight into the needs of media specialists, thus helping those that plan programming, training, and the appropriation of both equipment and supplies. These are the basic factors that enable the usage of satellite programming.

Assumptions

The basic assumption in this study was that all media specialists in the DeKalb County school system had access to satellite dish equipment for videotaping ITV as provided by the state. It was assumed that the media specialists were serving as the resource people for promoting and facilitating the use of PeachStar programming.

Delimitations

This study investigated the utilization practices and needs of the media specialists in regard to videotaping educational programming from the PeachStar satellite. A mailing of 138 surveys was sent to media specialists in DeKalb County Schools. All elementary, middle, and secondary schools were surveyed. No generalizations can be made about the usage of the satellite dish equipment by media specialists in other Georgia school systems.

Definitions of Terms

Analog transmission: a method of transmitting a continuous, electromagnetic wave where information is encoded in direct relationship to the power of the original light or sound source.

Digicipher: common name for a digital satellite receiver. It provides a clearer, crisper picture than an analog signal.

Digital transmission: a method of transmitting information using discontinuous, discrete sequences of electrical signals that change in order to represent or encode information. This stands in contrast to a continuous or analog method.

Distance Education: the process of providing instruction at a distance when the teacher is physically separated from the students. Instruction is usually provided through the use of telecommunications or computers. This may involve teaching a lesson or a sequence of classes. Distance education is often used to provide access to subject matter experts or to replace face-to-face instruction when a teacher or class would not be otherwise available.

Georgia Public Broadcasting: the umbrella state agency that includes PeachStar Education Services, Georgia Public Television and PeachStar Public Radio (Pipeline, 1996).

Georgia Public Television (or GPTV): Georgia's statewide public television network that consists of nine channels across the state (Pipeline, 1996). Programming from GPTV is openly broadcast for the home market and can be viewed without a satellite dish or cable television service. GPTV programming usually features pre-school programming during school hours and adult programming during non-school hours.

ITV: common acronym for the instructional television that is usually provided by Public Broadcasting Services for the purpose of facilitating learning in schools.

PeachStar: the common name used for PeachStar Education Services, a division of Georgia Public Broadcasting. PeachStar is responsible for providing educational programming to schools and operating the PeachStar satellite channel. Programming offered by PeachStar is broadcast solely for Georgia public schools, colleges, and universities, technical institutions, and regional libraries via satellite transmission. PeachStar programming is broadcast over the state's transponder on satellite TelStar 4.

Pipeline: a newsletter from PeachStar Educational Services informing schools about satellite-delivered instructional programming. The newsletter is mailed to media specialists monthly and provides programming schedules, articles on featured programming, and technical troubleshooting. It serves as a planning tool for media specialists. Each public school in Georgia receives twenty-five copies per month.

SERC (Satellite Education Resources Consortium): a nationwide network of state and city school districts that have pooled their buying power as well as technological resources. Located in Columbia, South Carolina, SERC is made up of 14 state education departments (including Georgia). SERC has created a satellite network that offers interactive instructional programming.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Few studies have been conducted on specific use of the distance education programs in Georgia. As a background to this study, this chapter discusses the historical foundations of instructional television in the schools, the role of the media specialist in facilitating the usage of instructional television, and the background of the satellite dish equipment that has been provided for Georgia public schools. This chapter will also look at the integral role of Georgia Public Broadcasting in providing satellite programming for schools in Georgia.

Historical Background of Instructional Television

The foundation of distance learning is traditionally traced back to correspondence classes delivered by mail. Then and now, the essential element in distance learning has been two-way communication between a student and instructor who are not physically present in the same setting. Telecommunications, delivered by radio and television transmission, moved distance learning into its second generation. The third advance in distance education occurred with the advent of the microprocessor which allowed instruction to be delivered by computers. While online computer instruction has been a growing phenomenon in distance education, this paper will be primarily limited to the historical development of telecommunications in the area of ITV as a basis for understanding satellite delivered instruction.

The history of instructional television in the school setting has been relatively short. The State University of Iowa is usually credited with broadcasting the first instructional television program in 1933 which featured a violin solo, a dialogue, and a drawing lesson. Philadelphia was also one of the early leaders in ITV, broadcasting their first series weekly for the Philadelphia public school system in 1947, in cooperation with three television stations. The series, which began as one program a week, grew to 13 programs a week by the early 1950s.

By the end of the 1940s, many educational broadcasters began to realize that they would need to take action to secure channels. Commercial interests had already secured the major VHF channels. The UHF band seemed to be the only alternative for educational television. Nineteen fifty was an important year for ITV. Educators from around the United States met with the National Association of Educational Broadcasters and the United States Office of Education's Radio Office to discuss how a portion of television programming could be focused on educational needs. From this meeting, the Joint Council on Educational Television was formed. This marked the official start of ITV.

The Joint Council on Educational Television helped schools work with the Federal Communications Commission to obtain educational channels. The council also campaigned to have television channels reserved specifically for community and educational programming. As a result of Joint Council on Educational Television's efforts, 209 channels were reserved for education, moving ITV from theory to reality (Buckland, 1991).

The role of television in education was greeted with mixed reactions. Some felt ITV would revolutionize the schools, relieving teacher shortages, providing demonstrations for students, and making one good teacher available to an unlimited number of students. Other educators felt that

the quality of instruction was too poor; ITV was too expensive; equipment was unreliable; and parents and teachers would not be interested.

A major benefactor for educational radio and television was the Ford Foundation. Overshadowing all other philanthropic organizations in broadcasting, the Ford Foundation was "willing and able to pour hundreds of millions of dollars into educational broadcasting" (Buckland, 1991). The Ford Foundation focused its interest in two areas, school instruction and adult education.

In 1956, the Ford Foundation and the Electronic Industries Association paired up to fund the installation of closed-circuit television (CCTV) in a school system in the area of Hagerstown, Maryland. CCTV was installed with the purpose of using ITV as a regular part of the instructional program in all grades and in all curriculum areas. Research studies followed to assess whether the use of television as a regular resource in the schools had improved student achievement. The studies centered on evaluating the scores on the Iowa Test of Basic Skills before and after the installation of CCTV. The research evaluation showed that ITV had made a difference, raising the percentile ranks on national norms in most subject areas significantly in both the rural and urban schools. In a similar study in Anaheim and Santa Ana, California, research found that CCTV had also favorably impacted test scores on the California Achievement Tests in most of the comparisons of pre- and post-television achievement.

By the end of the 1950s the promise of instructional television looked promising as the Maryland and California studies had helped to establish the value of this medium. The questions were now centered on how to best utilize television in education and how to transmit programming. The 1960s saw a boom in the number of existing broadcast stations as airborne UHF transmission became feasible. By 1967, the FCC had granted 85 channels for educational

purposes. "The passage of the Public Broadcasting Act in 1967 further stimulated these efforts by authorizing federal support for the distribution of educational programming through public telecommunications" (Corporation for Public Broadcasting, 1993). By the late 1960s, however, "the quality of the instructional television program was still hampered by a lack of sufficient and intelligent academic and professional media input, as well as by unrealistic budgets" (Terry, 1992).

Two children's programs, Sesame Street and The Electric Company, made their appearance in the early 1970s, significantly impacting the direction of ITV. Produced by the Children's Television Network, they used a different format from previous educational programs, drawing large audiences because of their appeal. For the program Sesame Street, $600,000 went into researching how to teach children basic skills and another $24,000 an hour was spent producing the program. The result was a show that appealed to both young children and parents with an effective ability to teach. The Electric Company, which aimed to help the non-reader in school, was also effective and appealing. Three major legacies resulted from these two programs. First, they demonstrated that a large capital investment of money was necessary to produce quality educational programming. Secondly, the format of these programs was a departure from other ITV, which had been presented as an add-on resource rather than a teaching medium by itself. Thirdly, the shows demonstrated the effectiveness of combining educational research with television content.

In the 1970s the transmission of ITV by satellite became a reality. Although satellites had existed in the 1960s, they were not generally used for transmitting educational programming. Satellite transmission of educational programming offered a means of wider dissemination of programming and a means of sharing resources. A number of states began setting up statewide

networks. The Kentucky Educational Television network was one such system. Serving the entire state, the Kentucky Educational Television Network's goals were (and still are) centered on improving education, reaching all students, enriching communities, and supplementing university instruction.

The invention of the videotape in the Seventies was perhaps the most significant innovation in television technology. A 1982-1983 study by the Corporation for Public Broadcasting, showed that ITV was being accessed almost equally through taped videocassette programs as by direct PBS broadcast. The cost of videocassette technology had decreased by the mid-1980s to the point where schools were able to afford this format. Educational films in 16mm format that took up large amounts of storage space could now be transferred to videocassette. "The videocassette technology released the power of the moving image for students to a level never dreamed of before" (Terry, 1992). Two delivery systems emerged: broadcasts using microwaves, coaxial cable and satellite transmission; and non-broadcast which included access to videocassettes or a videocassette library. In the area of ITV broadcasting, two major delivery approaches emerged; cable television and satellite transmission.

Satellite-based instruction has been spurred mostly by federal and state grant programs. In 1987, Congress enacted the Star Schools program, a federal program funded by the Department of Education that enabled students to be linked via satellite or cable TV hookup with teachers in different parts of the country. Star School awards were granted to schools that were isolated, small, or disadvantaged. Typically, Star School programs existed primarily in rural areas where students did not otherwise have access to teachers or courses in needed subject areas. The program provided schools with access to a wide array of subjects. Advanced classes in mathematics, science, and foreign language study were offered for the high schools. The

program targeted underserved populations in both elementary and secondary schools. "Legislation enacted in 1988 authorized an expenditure of $100 million for the Star Program over a five-year period" (Willis, 1994). The Star Program used the term "partnerships" to describe the different networks that developed and provided the educational programming. The four partnerships in the Star Program were and continue to be the Satellite Educational Resources Consortium (SERC); the TI-IN United Star Network, Inc. (a private corporation); the Midlands Consortium; and the Technical Education Research Centers (TERC). Each partnership was comprised of a variety of schools and universities, state education departments, public television affiliates, telecommunications services, and businesses from the private sector. A key part of the Star Program was the identification and selection of exceptional teachers for the purpose of asking them to develop and teach the programs that are broadcast by satellite or taught online. The Star Schools program continues today and is reaching 200,000 students in forty-eight states (Ely and Minor, 1996).

Major satellite networks such as the Satellite Educational Resources Consortium (SERC) have long provided specialized satellite courses. The SERC network is made up of fourteen member states (including Georgia) and the cities of New York, Detroit, Kansas, and Cleveland. Georgia was one of four to six states that initially founded SERC. As one of the founders of SERC, Georgia schools received consortium piloted courses for high school credit. Under a federal grant, SERC provided a satellite dish for free to schools that piloted their Japanese and advanced math courses. Today, the fourteen member states work together to combine their buying power and technological resources, and to share programming. The SERC network serves as a partnership between public television and state departments of education. SERC is now one of several major providers of distance learning resources to educators in high schools

and middle schools. The SERC network also broadcasts specialized satellite courses in foreign languages, science, and math, often helping students in rural schools earn high school credit. The classes require "access to a satellite downlink, television monitors to view the program, and a telephone or FAX machine for questions and discussion" (Repman, 1996). Access to a telephone line for communicating by faxes or phone calls is the key element for making the instruction interactive between student and instructor.

Most PBS programs are funded in part by a combination of private sector money, PBS funds, and federal government appropriations. "Fifteen percent of all instructional programming for public television is produced locally, with PBS providing 63.9%, regional networks providing 14 %, ITV suppliers generating 6.1% and commercial syndicators providing 4.4%" (Holmes and Branch, 1994). The Magic School Bus, a program which explains principles of science to primary school students, is underwritten by Microsoft Corporation. The program is also supported by the National Science Foundation and the Department of Energy. The science series, Newton's Apple, receives corporate sponsorship from Dupont. Major funding for the Bill Nye the Science Guy series is provided by the National Science Foundation. Additional funding for this series is provided by the Boeing Company, the Corporation for Public Broadcasting, and the Intel Foundation. Often, the executive producer of a series has to expend a great amount of time knocking on corporate doors, chasing donations to ensure funding. Ideally, programs produced locally would meet the educational needs of the local school systems. "The problem is that producing even the most simple television that can stimulate and hold a sophisticated audience of young people can be very expensive. As a consequence, very successful locally originated educational programs are rare and are usually the result of extremely gifted educators and/or cable facilitators" (Kamil, 1994).

Government funding of public broadcasting has been controversial. "Federal tax dollars supply less than 17% of the total system budget, and in some locales as little as 6 % of individual station budgets" (Siegel, 1993). Every three years, Congress is called upon to review funding for the Corporation for Public Broadcasting. The Public Telecommunications Act of 1991 authorized $1.1 billion in funding for the Corporation for Public Broadcasting for 1994, 1995, and 1996 (Siegel, 1993). The debate took up hundreds of pages in the Congressional Record with critics such as George Will charging that the Corporation for Public Broadcasting was an "upper middle class entitlement program" (Siegel, 1993) that did not merit public subsidy as it did not offer balanced programming that was distinct from cable television offerings. The elite nature of PBS's target audience was documented by looking at the income level of the donors. Sharon Percy Rockefeller and other supporters of subsidizing PBS asserted that donors should not be confused with viewers. They maintained that programs such as Sesame Street could not be considered elitist as they reached a wide audience of low income households (Siegel, 1993). The issue of federal funding for PBS has continued to be controversial. In 1994, conservatives such as House Speaker Newt Gingrich and Sen. Larry Pressler lead the battle to eliminate federal funding for public broadcasting charging that it was an unnecessary expense in the age of cable television (Bash, 1995). PBS president, Erivn S. Duggan and others from the Corporation for Public Broadcasting, defended PBS programming arguing that a good portion was spent on education and that small public television stations could not survive without federal aid (Zoglin, 1995). Funding for PBS was continued after Gallup and PBS polls showed that a majority of Americans favored federal support of public broadcasting (Gable, 1995).

The use of satellite broadcasting in the classroom turned controversial in 1990, when Whittle Communications Inc. began broadcasting "Channel One," a television news program

into secondary schools. In exchange for receiving a free satellite dish, a videocassette recorder, and free television monitors in almost every classroom, schools had to sign a three year contract with the company, agreeing to expose students to ten minutes of news and two minutes of commercials every school day for three years. The ethics of showing commercials in the classroom, the format of the news program, and the issue of taking twelve minutes out of the instructional day have continued to be controversial as Channel One has spread their program to more secondary schools around the country. Since 1990, approximately 40% of all secondary schools in the U.S. have been equipped with a television network as a result of contracting with Channel One. (Collis, 1996)

Televised distance learning programs today can encompass a number of technologies and media. Instructional programming can be offered through teleconferencing, interactive video, cable television, and PBS programming. Teleconferences are distributed over satellite and are well suited for staff development. They can be viewed in one central site and also telecast over a local educational access channel to allow other educators to view these programs. Many teleconferences are broadcast live and encourage viewers to call-in and participate. Interactive television can be offered through local telephone companies, cable television companies and satellite access. Often this medium is used to link schools for Advanced Placement or other upper level courses. Students from different schools can be linked via video cameras, mounted microphones, and television monitors for the purpose of seeing and hearing their distant classmates and teacher. "Such courses deliver all of the student instruction as well as grade student assignments, tests and quizzes" (Schiller, 1993).

Cable television today has many notable networks that broadcast educational programming. Stations such as Arts & Entertainment and Bravo provide a variety of cultural programming in

the arts. The Discovery Channel broadcasts science and nature shows geared for middle and high school students. A specific subject is broadcast each day on The Discovery Channel's ASSIGNMENT DISCOVERY. Turner Broadcasting System provides a fifteen-minute daily news broadcast geared for students through its Cable News Network. To aid the teacher, a classroom guide for the daily CNN Newsroom broadcast is available through electronic mail or the World Wide Web. The guide provides a program rundown, suggestions for activities and discussion, and a list of related news terms. The Turner Broadcasting System also offers electronic field trips for students to places such as East Africa through Turner Educational Services. C-SPAN, The Weather Channel, and The Learning Channel are also used by educators for instructional programming.

Issues Affecting Utilization of Educational Programming

Time has continued to be a factor that has hampered the effective utilization of technology in schools, according to Betty Collis, author of Tele-learning in a Digital World. The workload that teachers carry has left little time for exploring new technologies or resources for "tele-learning." She defines tele-learning as "making connections among persons and resources through communication technologies for learning-related purposes" (Collis, 1996). Because time is limited for teachers, the VCR has been a critical tele-learning technology, making it possible for the teacher to preview programming, make decisions about the content, and use the videotaped broadcast on a schedule that fits the teacher's need rather than the broadcaster's schedule. The

element of time is a critical factor, as teachers need time to preview, study, and incorporate a broadcast into their instructional plan. This becomes meaningless, however, if teachers are not even aware of broadcast or taped materials that are available. Media specialists that support educational television in the schools can play an important job in bridging this gap by reading broadcast schedules, previewing programs, and suggesting ways to integrate the programming into the instructional process. Collis maintains that broadcast programming needs to be carefully integrated with other learning activities by the teacher in order to exploit its full educational value. The value of support materials and lesson ideas for teachers is not only helpful, but necessary for effective television use.

Studies of Channel One usage in 1991 and 1993 have supported the use of instructional television as well as the importance of integrating television programming into classroom instruction. A 1991 study found that students that received follow-up discussion or lesson integration of the Channel One broadcasts performed significantly better on tests of general knowledge in comparison to students that did not have Channel One. The 1993 study compared students who watched Channel One with non-Channel One students. Again, Channel One students performed better on a test of world events; however, the difference was less significant. While the studies illustrated that instructional television did impact students' knowledge base, the greatest impact occurred when teachers integrated Channel One broadcasts into lessons or used follow-up discussions. The teacher made the critical difference in the impact of the broadcasts (Collis, 1996).

The benefits of educational programming are numerous according to Glen Holmes and Robert Branch (Holmes & Branch, 1994). Cable television programming allows the teacher to incorporate examples of the most current real world events into class discussions as well as

expose the students to cultures other than their own. Cable television programming also gives students the opportunity to learn about perspectives that may differ from their instructors'. This is a medium, too, which can be easily understood by students. Despite these advantages, Holmes and Branch find impediments to using this medium of instructional programming to full potential:

> "The potential for instruction provided by cable in the classroom is eclipsed, however, by the number of educational practitioners who remain uninformed about the concept or who lack proficiency in the use of protocols and strategies necessary to optimize the benefits of cable in the classroom as a form of instructional telecommunication. Teachers, trainers, and educational administrators nationwide would benefit from structured opportunities, rather than trial-and-error, to learn how to maximize the potential of the medium" (Holmes & Branch, 1994).

Holmes and Branch describe other problems and barriers associated with educational broadcasting. Cost has remained a barrier on many levels for linking schools to cable television. Many schools still do not have the necessary television monitors, video tape recorders, fax machines, and satellite dishes to make educational programming accessible. The expenses involved in connecting schools to cable transmissions vary considerably depending on the mode of transmission and the available resources in an area. Costs for producing educational programs has also remained a problem as advances in technology have meant rising costs in program production. Continuing financial support for public broadcasting by Congress has also remained an issue. Educational programming is largely dependent on congressional funding and mandates "which reserve a portion of air-waves for non-commercial and educational uses" (Holmes & Branch, 1994).

Barron raises other issues in the use of instructional television. The purpose of instructional television is to assure learning. Creative teachers can use this medium well only if they are aware of the availability of programming and its instructional potential. "The library media

specialist can play a critical role in educating teachers as to the potential as well as providing the intellectual access to the schedules and ancillary materials that often accompany such programming" (Barron, 1994). Barron maintains that television must be viewed as more than enrichment or supplemental in nature to be fully effective:

> "An important concept that teachers must believe and practice is that television, like all other technology, must be integrated into curricula, courses, classes, and assignments. If television, or any other application of technology, including the media program itself, is viewed as 'support' or 'enrichment,' educators concerned with perpetuating innovation in these areas are out of luck"(Barron, 1994).

The negative perception of television as an entertainment medium has also been a barrier according to Barron. Teachers may be admonished by administrators and parents if they go beyond the textbook and the traditional lecture. Barron believes that both teachers and library media specialists may have to do some reeducating to change this negative perception of television.

In 1995, a study of cable usage in schools was conducted by Malarkey-Taylor Associates, Inc. for Cable in the Classroom. "Cable in the Classroom is a public-service initiative of the cable television industry. It is a joint project of local cable operators and national cable programmers to provide schools with free basic cable service and more than 450 hours of commercial-free educational television programming each month" (Cable in the Classroom fact sheet, 1998). As a public service for schools, Cable in the Classroom publishes a monthly magazine with listings of educational programming. The study commissioned by Cable in the Classroom surveyed teachers and coordinators who used Cable in the Classroom programming as well as other electronic information resources. The study showed that teachers found Cable in the Classroom programming much easier to use and more effective than the Internet or online services. Teachers also judged cable television programming to be more effective and somewhat

easier to use than computers, laserdiscs and CD-ROMs. Malarkey-Taylor's research found that PBS provided the most frequently used television programming, followed by The Discovery Channel and CNN. The study also looked at which program providers teachers were using once a month or more. The results showed that 69% of the teachers used PBS programming once a month or more, 58% used The Discovery Channel, 49% used CNN, 15% of teachers used The Weather Channel, and 12% used C-SPAN once a month or more. Secondary schools were found to use CNN, Arts & Entertainment and C-SPAN more frequently than elementary schools and elementary schools were found to use The Weather Channel, The Learning Channel, and Nickelodeon more frequently than secondary schools. Among those factors limiting the usage of Cable in the Classroom were lack of training, lack of access to cable lines in the classroom, and lack of class time for using cable programming. The use of television programming, however, encountered fewer barriers than the use of computers, laserdics, and CD-ROMs (Malarkey-Taylor, Inc. 1995).

Standards for Library Media Specialists

In 1988, the American Association of School Librarians and the Association for Educational Communications and Technology partnered to establish guidelines for media specialists in a publication entitled Information Power: Guidelines for School Library Media Programs. The role of the library media specialist in providing adequate resources for the information needs of the user was clearly defined. In meeting the information needs of the school, the media specialist was deemed responsible for providing access to resources that would meet the specific curriculum objectives and interests of the students and staff. Facilitating access

to information for meeting the changing needs of users involved using resources outside the school 'by networking with other information agencies, borrowing or renting specialized materials, and/or using telecommunication devices to transmit information" (American Association of School Librarians, 1988). Emphasis was placed on not only providing access to materials, but also on identifying and alerting users to resources and services that would met their needs. "Distance education, when viewed an as extension of the technology uses suggested in Information Power, demands. . . working in partnership with the subject specialist teacher, providing information services to support students and teachers, helping students and teachers to use the full range of available information and educational technologies, and managing the systems and processes for equitable access" (Barron, 1994).

In 1996, the American Association of School Librarians and the Association for Educational Communications and Technology began publishing drafts for a new version of Information Power on the Internet. An update in November, 1997, outlined their guidelines for three principal areas: "Learning and Teaching," "Information Access and Delivery," and "Program Administration," the three essential elements of the library media program. In the area of "Learning and Teaching," guidelines for the library media program stipulated providing access to a full range of resources by integrating the use of technology. The diverse learning abilities and needs of the students were to be met by encouraging and engaging "students in reading, viewing, and listening for understanding and enjoyment" (American Library Association, 1997). In the essential area of "Information Access and Delivery," guidelines called for providing access to information and resources to meet the diverse learning needs of students. Finally, in the area of 'Program Administration," the effective management of these resources was considered essential to providing a structure for a strong library media program.

In Georgia, the Georgia State Department of Education defined the standards and guidelines for media specialists in Media Specialist's Handbook: You Are the Key in 1991. In this publication, the role of the media specialist was outlined as a facilitator in coordinating videotape requests for educational programming. The role and the responsibility of the media specialist included coordinating the videotaping of programming and taping rights, as well as providing access to teacher support materials to enhance curriculum integration of instructional television programming. Information concerning educational programming from Georgia Public Television was provided in the handbook. The handbook also listed outstanding use and integration of videotaped instructional television as one of twenty-four component areas that could bring recognition to the library media specialist.

> "The whole focus in the Department of Education was towards building the media center as a center for information and that focus grew and grew and grew within the department. That focus goes back to the early 1980's . . . [It was] a division that was focused on integrating television and print resources for the media specialists and media centers." (Baughman, 1998).

Through Media Memo, a newsletter sent to school media specialists on the 15th of each school-year month, media specialists were informed of television programming from Georgia Public Television and of news from the Georgia Department of Education. Media Memo ceased publication circa 1992. PeachStar's Pipeline newsletter and the PeachStar Program Guide now provide ITV program and scheduling information for media specialists.

Instructional Television in Georgia

Satellite Receiving Systems in Georgia Public Schools

In 1992, the lottery was authorized in Georgia by voter referendum. Voters authorized an amendment to the Georgia constitution that stated: "The General Assembly may by law provide for the operation and regulation of a lottery . . . and the governor shall make specific recommendations as to the educational programs and educational purposes to which said net proceeds shall be appropriated" (Constitution of Georgia, 1998). Proposal recommendations from the Governor for use of the lottery proceeds are voted on by the Georgia General Assembly. The provisions of the lottery proceeds may be used only for educational purposes as specified in the Constitution. "By law, Georgia's lottery proceeds cannot be used to supplant any existing education funds. They must supplement education funding . . . Georgia may be the only state to succeed in doing that" (Miller, 1995).

In 1993, $12,304,078 of lottery revenues were used by the state to place satellite receiving systems in all Georgia public schools (Georgia Department of Education, 1998). As a result, 1,700 elementary, middle, and high schools in Georgia received satellite dish equipment provided by the state. At each school, a steerable dish, receiver, monitor, and VCR were installed by Convergent Media Systems. Satellite dishes were also installed in every college, university, technical institute, and regional library in the state, making this the largest deployment of satellite dishes in the country. Funding from the lottery proceeds for the satellite equipment was authorized as a one time expense. For subsequent years, the state made provisions for public schools built after 1994. New schools have not automatically received a

satellite dish, but have been able to acquire one by applying to the State Department of Education.

The decision to place satellite dishes in schools came from Governor Zell Miller. Governor Miller was impressed when he witnessed a group of high school students speaking Japanese as a result of the satellite programming they were receiving from Nebraska. The students were from White County in northern Georgia and had been ushered in to Governor Miller's office by Joey Baughman from the Department of Education. The White County High School students also demonstrated what they were learning in front of the Senate Education Committee.

> "I took a group of kids from White County High School to visit the governor one day in the Capitol in his office. I asked those children not to speak English while we were there in his office and they did not. He was so incredibly impressed by those kids that he even made the statement that 'I need to take these kids to go on the road with me.' I was there. I saw that happen and he was ecstatic. He was excited over the fact that the kids were getting this in rural Georgia. He thought if kids in White County can learn Japanese by putting just a dish in the yard, why can't they learn a whole host of things by satellite. We also brought a truck which we parked outside [the Capitol] which brought in a signal from Nebraska. This made it possible to show the programming from Nebraska to the Senate committee. We brought the kids into the Senate and they actually took the course right there in front of the Senate Education Committee." (Baughman, 1998).

The students from White County High School had been learning Japanese and an advanced math course as a result of a federal grant obtained by SERC. As a pilot project, the SERC federal grant put satellite dishes in four schools in Georgia. Governor Miller was impressed by how much the students had learned from the satellite class despite the fact that none of the teachers at the school spoke Japanese. Governor Miller was also aware that White County had been chosen as the site for a small Japanese business. "One way White County sold this business was the fact that they had a work force that possibly could work for them that spoke Japanese" (Baughman, 1998). The governor envisioned that courses such as physics, Japanese, calculus, and Russian

could be beamed to every school in the state if satellite dishes were purchased for the schools. "Governor Zell Miller believes that putting satellite dishes at every school will completely revolutionize the state's educational system by giving students, especially in rural Georgia, access to subjects like advanced physics or Japanese" (Miller, 1994).

In 1994, PeachStar Education Services, a new division of Georgia Public Broadcasting, was created. Funded largely by the Georgia legislature, PeachStar's mission was and has continued to be that of providing schools with instructional programming via the PeachStar Satellite Network. PeachStar Educational Services was now one of three divisions under the umbrella of Georgia Public Broadcasting. The other two divisions of Georgia Public Broadcasting were Georgia Public Television and Peach State Public Radio. Educational broadcasts from GPTV were open broadcasts for the home market that could be picked up without a satellite dish or cable television service. In contrast, broadcasts from PeachStar were transmitted solely for schools and could only be picked up via an appropriate satellite dish and receiver. Programming provided by PeachStar was broadcast over the state's own transponder on satellite TelStar 4. As a result, Georgia became the first state to own a transponder on a Telstar satellite.

For fiscal year 1995, the governor recommended again that lottery funding be used to support the satellite dish initiative. This time, $2.3 million was appropriated by the Georgia General Assembly to install security fencing for the satellite dishes (Georgia Department of Education, 1998). Fencing was placed around each satellite dish in order to protect the satellite dishes from possible vandalism.

In a speech given at a conference in San Francisco in 1995, Governor Miller discussed his commitment to distance education.

> "First, we made sure every single public school, college and technical institute in the state had a satellite dish. Then we became the only state to own a transponder on a Telstar satellite. In fact, Georgia today leads the nation in many distance learning measures. We rank first in the production of educational programming [and] first in the number of both students and schools served by satellite-based instruction" (Miller, 1995).

In the summer and fall of 1996, the satellite receiving equipment in all Georgia public schools was upgraded. Digital satellite receivers were added to the satellite receiving systems to accommodate a transmission switch from analog to digital format. This upgrade allowed for a better quality transmission as well as increased PeachStar capacity for offering programming. Each school received two Digicipher 4200 Digital Satellite Receivers, commonly referred to as Digiciphers. The Digiciphers allowed for a clearer, crisper picture than had been the case with the analog signal that the schools had been receiving. The Digiciphers also required less bandwith to transmit a digital signal, allowing PeachStar to broadcast more programming. As a result of the conversion, Georgia Public Broadcasting now had the ability to accommodate twelve television signals on their satellite transponder instead of transmitting two analog signals.

Library media specialists in Georgia schools were put in charge of the satellite dishes as they were already serving as the resident ITV resource people for each school in Georgia. As was outlined in the state's Media Specialist's Handbook: You Are the Key, the library media specialist's role and responsibilities included coordinating use of instructional television by taping the programming on request and facilitating the integration of ITV in the instructional process (Media Specialist's Handbook, 1991). Following the practice of the Georgia Department of Education, PeachStar directed information concerning the scheduling of their satellite programming to the media specialists.

> "I think when I was a part of the Media Division in the Department of Education that we felt, and I think rightly so, that the media specialist was the key to the resources for the teachers. It was so logical to me. . . that was a working situation. The equipment is in the media center. The scheduling of that equipment comes through the media center in a school and it just seemed logical that that was our [PeachStar's] door into the school" (Baughman, 1998).

As the liaison between teachers and educational programming, their role as a facilitator was a significant one in facilitating the usage of PeachStar programming. An annual program guide as well as a monthly newsletter, Pipeline, was distributed to media specialists to keep them informed about PeachStar programming. The PeachStar newsletter reminded media specialists to stay informed and active in promoting PeachStar programming. "We depend on you, as media specialist, to distribute the newsletters in your school. Please put a Pipeline in the hands of as many classroom teachers as possible" (New in Town?, 1997).

The Role of Georgia Public Broadcasting and PeachStar

A survey of the literature found little written on the role of PeachStar Educational Services or its parent organization Georgia Public Broadcasting. The primary source of information about these organizations was and has continued to be PeachStar's Pipeline newsletter. Pipeline was published as part of Governor Zell Miller's distance learning initiative to disperse scheduling and programming information to library media specialists in Georgia. Pipeline began in September, 1994, as a communication vehicle to inform schools of PeachStar's line up of satellite programming. Schools receive twenty-five copies of PeachStar Pipeline, a monthly newsletter containing a schedule of all programs aired on PeachStar. Pipeline also contains feature articles

on programs, program providers, utilization of programming, off-air taping rights, and technical help information. In addition, the Pipeline publication facilitates utilization of the satellite dishes by publishing toll-free phone numbers for a Satellite Help Desk and rebroadcasting requests by individual schools. Beginning in 1996, an online version of Pipeline has been published on the World Wide Web at http://www.gpb.org/pstar/pipeline.htm.

In the fall of 1994, Georgia Public Broadcasting created a new division called PeachStar Educational Services. Previously, educational programming for schools had been broadcast through GPTV. With the addition of PeachStar, Georgia Public Broadcasting underwent a format change and in effect became a two-channel network. PeachStar began broadcasting educational programming into the schools via the satellite dishes. On week days, this enabled GPTV to focus more on pre-school entertainment intended for home use through their local channels. Programs intended for home became the sole focus of WGTV/Channel 8 and WPBA/Channel 30, ending the mixture of pre-school programming, adult programming, and educational programming for schools that had characterized previous programming on these GPTV channels. Channel 8 and channel 30 were then able to concentrate on the pre-school market during school hours as a result. This allowed GPTV to become more competitive with pay-for-cable networks such as Nickelodeon that had been siphoning off their younger viewers. In contrast to GPTV, PeachStar's sole responsibility was to broadcast programming for the schools. Initially, PeachStar began with a plan of broadcasting 22 hours a week of educational programming over the satellite dish (Scott, 1993). By 1998, PeachStar was broadcasting six to eight hours of instructional programming into the schools each day (Raudonis, 1998).

Two studies have been conducted concerning the extent to which Georgia schools have utilized PeachStar programming. In 1995, the Atlanta Journal Constitution conducted a survey

on the impact of lottery funded educational technology in Georgia schools. Out of a mailing to 909 Georgia schools, 348 media specialists and other faculty members responded to the survey. The survey, which was mailed to all Metro Atlanta schools and a random 25 percent sample of rural schools, showed that four out of five schools statewide and two out of three schools in Metro Atlanta used satellite programming during a typical week (Teaching in a Time of High Tech, 1995). In terms of rating the usefulness of the satellite dishes, only 13 percent responded negatively, stating that the satellite dish was of little use (White and Reagan, 1995).

In 1996, Georgia Public Broadcasting commissioned Beth Schapiro & Associates to study the usage of PeachStar programming by educators. Through telephone interviews, Beth Schapiro & Associates surveyed 504 teachers and media specialists in all areas of the state (Beth Schapiro & Associates, 1997). The study showed that PeachStar programs were used more in the lower grades. Usage decreased as grade levels increased. A correlation was also found between usage and the size and location of the school system. Experienced teachers in large urban school systems were more likely to be familiar with and use PeachStar programming. The results also showed that media specialists were far more likely than teachers to be familiar with PeachStar programming and feel more comfortable using ITV. Media specialists also believed PeachStar programming was being used more often than the teachers themselves reported actually using the programming. Beth Schapiro & Associates also found that teachers were not using PeachStar programs to their fullest potential despite the fact that nine out of ten educators considered instructional television valuable. An event in January, 1997, also provided PeachStar Education Services with some idea of the extent to which their programming was being used. During that month, the AT&T telecommunications satellite PeachStar was using vanished. For the four days

that PeachStar was off the air, Georgia Public Broadcasting received more than 7,500 calls from people wanting to know why they could not receive PeachStar programming (Raudonis, 1998).

In 1995, lottery funding again impacted public and educational television when money was allocated for the construction of a new facility for Georgia Public Broadcasting. $26,921,000 was allocated by the state legislature for a new building for Georgia Public Broadcasting (Georgia Department of Education, 1998). By August 1997, all divisions of Georgia Public Broadcasting had moved into their new facility in downtown Atlanta. The new broadcasting site was part of Governor Zell Miller's vision to see PeachStar involved in producing more educational programming. The new site provided Georgia Public Broadcasting with the most technically advanced public television and radio facility in the nation with nine television studios, six of which were dedicated to distance learning, as well as editing and production facilities. "The 12.2 million spent on technology - including 600 miles of cable - makes this the first fully digital public broadcasting operation in the nation and provides opportunities for Georgia educators that few could have dreamed possible just a few short years ago" (Raudonis, 1998). According to Georgia Public Broadcasting director, Dr. Werner Rogers, "it won't be long before we have 12 to 16 channels available for PeachStar educational programming to schools" (Raudonis, 1998).

Instructional Programming From PeachStar

The programming provided by PeachStar comes from a variety of providers. While some programs have been produced locally by PeachStar, most have been purchased for broadcast with copyright privileges included through negotiated contracts for special rates. The copyright privileges in many instances have been generous. If copyright privileges for a series extends for

a school year, schools can use the tapes at any time during that year. If PeachStar purchases the rights to the program the next year, schools can continue to use these tapes for another year. PeachStar uses numerous program providers. Some of these include the University of Alabama, Educational Management Group, Los Angeles County Office of Education, TEAMS Distance Learning, H.E.B. Satellite in the Classroom, Public Broadcasting Service, and Georgia Public Television. As a member of the Satellite Education Resource Consortium, PeachStar is also able to help schools find full credit classes from the consortium network.

Because of strong funding support from the Georgia legislature and Governor Zell Miller, PeachStar has been able to produce more programming than any other local or state public television network. The legislative dollars have also enabled PeachStar to produce quality programming that has won awards. According to PeachStar's director, Joey Baughman,

> "We have been very fortunate. Because we have been able to produce on our own quality programming that has brought dollars into us. We have produced for the Educational Management Group of Phoneix. We were just approached by Simon & Schuster to produce for them. We are working with McGraw Hill now in collaboration with our Spanish program. By having had the dollars so far to produce quality programming, it has almost been like a magnet to bring in other sources of money" (Baughman, 1998).

Despite this success, however, PeachStar has still had to knock on doors to get funding to produce some of its programming. A new series, American Ideals, which is in the planning stage will require underwriting. "We will produce the first program [for American Ideals], then we will do a pilot across the country, and then hope for underwriting. So, I may not be able to go forward with it unless I can knock on someone's door that wants to underwrite it" (Baughman, 1998).

Series produced by PeachStar have included Georgia Stories I, Georgia Stories II, Salsa, Irasshai, Multimedia in the Classroom, Count On It!, Finders Seekers, Science Keepers,

SuperScience with Molly & Bert, and various teleconferences. In 1994, PeachStar produced its first series, entitled Georgia Stories I. Georgia Stories was produced to fill a perceived need for resources in the area of Georgia history.

> "I had been in the Department of Education and listened for years to the social studies people say that there were never enough resources in the area of social studies. There had always been this need for Georgia history and we kept sending this across the street to the Georgia legislature and could never get it funded. But, we did not have to line item our budget here at PeachStar and so it seemed like I had died and gone to heaven. Here, I had a budget for whatever I felt was the thing that we needed to do the most. So, obviously Georgia history came to mind immediately" (Baughman, 1998).

The series was produced in correlation with the eighth grade Georgia history curriculum, giving a chronological history of the state from the age of dinosaurs to the present. The producer used archival film and photographs, interviews by scholars, and recreations of events to tell the stories of Georgia's history. Episodes included interviews with Georgian residents that lived through the time periods being discussed. The series was designed to capture state history, supplementing eighth-grade social studies. Georgia Stories also filled a curriculum need for fourth grade social studies teachers. A second series, Georgia Stories II, focused on Georgia's economic development from colonial status to modern industrial times. PeachStar later developed a Web site for teachers to make available resource materials that correlated to the Georgia Stories video lessons. The resource materials were collected from archives in the state to provide primary source material for educators. The Georgia Stories series has won numerous state, national, and international awards for excellence in educational programming as well as the Wilbur Schramm Award for Best Instructional Series in the United States.

Salsa premiered in 1997 as a series designed to teach elementary school students the Spanish language and culture using a variety of puppets. The success of the Salsa series has

meant that PeachStar may be able to market the series nationally, and thus generate funding. Count on It!, a mathematics series for primary grade students was also produced by PeachStar. Using two puppets, Blossom and Snappy, math concepts were explored through field trips to places such as the zoo or a neighborhood store. The award winning Count On It! series was based on learning objectives from National Council of Teachers of Mathematics.

In 1996, PeachStar began broadcasting the award winning Irasshai, a Japanese language course for high school students. Teaching Japanese culture as well as the language, Irasshai allowed high school students who registered and enrolled to earn full credit for a one-year course in Japanese I or II. The two levels of Irasshai begin broadcasting in September each year and continue for the length of the school year. Tim Cook, the teacher for Irasshai, has won an Emmy for Individual Excellence in the performer category. PeachStar has marketed Irasshai around the nation. Irasshai is an interactive course in which students get to speak with native Japanese speakers twice a week over the telephone. Out of state schools interested in the Irasshai course enroll with PeachStar and pay $450 per student per year. In Georgia, the fee charged per student is $350 per student per year. This has generated some funding for the PeachStar Satellite Network. PeachStar has chosen not to put their courses with any other providers. Instead, PeachStar markets its own programs.

In developing programming, PeachStar uses a task force of educators and specialists that are responsible for correlating PeachStar's programming with the state's Quality Core Curriculum. In addition, PeachStar often offers resource materials to help the teacher integrate the programming into lesson plans. Supplemental materials offered by PeachStar are referenced to the state's Quality Core Curriculum. A new civics series on citizenship and the Bill of Rights, entitled American Ideals, will be aimed for fifth graders. Like other series produced by

PeachStar, the content of American Ideals was developed to address specific learning objectives in the state's Quality Core Curriculum. In a similar process, the series Salsa was also designed by a task force of experts in the fields of early childhood education, Spanish, and foreign language instruction.

PeachStar offers flexible scheduling for the instructional programming that they provide. Media specialists and teachers have the option of requesting programming or "video on demand" (Raudonis, 1998). PeachStar has two channels. One is dedicated for occasional use programming. This channel allows PeachStar to broadcast customized educational programming from their library of programs. Media specialists also have the option of dialing an eight hundred telephone number and requesting rebroadcast of programs that they may have missed. In the first quarter of 1997, PeachStar broadcast 73 hours of customized video on demand (Raudonis, 1998).

The Atlanta area, which is also home to the Turner Broadcasting Network, has provided PeachStar with an advantage for producing programming. According to Georgia Public Broadcasting's Executive Director, "this gives us access to a wealth of production and broadcast talent who we can hire on an as-needed and project basis, rather than having to have them on a full-time payroll. That provides us with a great amount of flexibility and helps hold our costs down"(Raudonis, 1998).

According to Dr. Rogers, "There is no doubt that Georgia is a national leader in the use of technology in education. We are number one in satellite-based instruction, number one in terms of children served, and number one in terms of dollars spent for instructional programming for distance learning. What we are attempting to do is enhance what teachers do in their classrooms, not replace them. We want to be a resource for teachers, which is why our staff is working

closely with educators to make sure all of our programming is coordinated with the state's new Quality Core Curriculum. With just the touch of a few small buttons on a remote control device, teachers will be able to bring into their classrooms the products of millions of dollars of technology and human creativity—a vast array of instructional programming designed to enrich their lessons plans. That's why we call PeachStar, 'The Classroom that Comes toYou'" (Raudonis, 1998).

Summary

A review of the literature has shown that the history of instructional television in the school setting has been relatively short. Beginning in 1933, with the first ITV broadcast, educational broadcasters have had to struggle with securing channels, funding, and professional media input to produce quality educational programming. The Ford Foundation helped to move ITV forward in projects such as the "Hagerstown Project" by becoming the major philanthropic benefactor for educational television. It was not until Sesame Street was produced in the 1970s, however, that educational television had wide appeal. Sesame Street impacted educational television by demonstrating that a combination of a large capital investment of money and educational research were necessary to produce effective educational programs. The 1970s also saw the beginnings of a number of state ITV networks using satellite transmission. Despite successful programming, federal funding, and the establishment of satellite networks across state lines, ITV still faces a number of problems today. Funding on state and national levels for ITV continues to be an issue for this medium, and competition has been growing from cable networks that broadcast quality educational programming.

Little has been written on instructional television in Georgia despite the fact that Georgia is a national leader in state produced educational programming and services. Educational programming for Georgia schools is provided by PeachStar Education Services, a division of Georgia Public Broadcasting. From the establishment of a state lottery for educational purposes in 1992, all public schools in Georgia received satellite dish equipment for receiving PeachStar programming. This has remained the largest deployment of satellite dishes in the nation.

Because of funding support from the Georgia legislature, PeachStar has been able to produce more programming than any other state network. In developing programming, PeachStar has made wide use of educational experts. As a result, programming from PeachStar has received a number of awards, generating further interest and recognition for PeachStar Education Services. In 1997, Georgia Public Broadcasting moved into a new facility supported by lottery funding. This $26 million dollar facility provided Georgia Public Broadcasting with nine television studios for producing programming and providing distance education. The support from the Georgia legislature and lottery funding has placed Georgia as a national leader in the use of satellite-based instruction, the amount of programming produced, and in the amount of money spent for instructional programming.

Library media specialists in the Georgia' s public schools have been given the role of facilitator for coordinating and promoting the usage of PeachStar programming. This role includes informing teachers of programming, coordinating the videotaping of programming and taping rights, and providing access to teacher support materials to enhance curriculum integration of PeachStar programming. The main communication link between PeachStar and the media specialists has been PeachStar's Pipeline newsletter that informs media specialists and teachers of programming schedules and new programs on a monthly basis. Ultimately, the utilization of PeachStar programming in Georgia schools is dependent on its promotion and support from library media specialists at the individual school level.

Chapter 3

METHODOLOGY AND PROCEDURES

A survey questionnaire methodology was used in this descriptive study to determine usage of the satellite dish technology for taping PeachStar programming. Major demographic and logistic factors influencing the utilization of the satellite equipment were explored. Media specialists were asked to rate the factors that facilitated or impeded utilization of PeachStar educational programming. The tasks involved in videotaping satellite programming were also examined. Finally, media specialists were asked which series they had videotaped on a regular basis as well as those factors that influenced the selection of programs to be videotaped.

Population:

All of the library media specialists in the DeKalb County School System were selected as the population for this study. The list contained 138 media specialists. Table 1 shows the breakdown of the media specialists by elementary, middle, and high school, and other. Two media specialists fell in the other category: one assigned to the Fernbank Science Center and one assigned to the Special Education Centers.

Level/Type	Number of Media Specialists	Number of Students
Elementary School	80	53,736
Middle School	21	11,733
High School	35	25,161
Other	2	499
Total	138	91,129

The DeKalb County School System is one of five Metro counties in the metropolitan Atlanta area. Because it serves a population of 91,129 students, the DeKalb County School System is one of the two largest school districts in the state.

Instrument:

A six-page multiple-choice questionnaire in booklet form was developed by the author to provide answers to the research questions. The survey instrument (see Appendix A) was designed to investigate the use of the satellite dish technology by media specialists in the DeKalb County schools. Each item in the questionnaire was designed to provide appropriate information necessary to answer the four major questions being investigated.

1. *What is the frequency of satellite dish usage and what tasks do media specialists perform in the overall usage of the satellite dish?*

   Questions concerning the tasks performed by media specialists were designed to characterize usage patterns by DeKalb County library media specialists. These included the practices employed in informing teachers about PeachStar programming, the frequency of videotaping, usage of the Satellite Help Desk, requests for rebroadcasting of missed programs, and the circulation and cataloging procedures for videotaped programs. Questions 2, 4, 6, 8, and 10 addressed these tasks.

2. *What factors facilitate or impede utilization of the satellite dish?*

   In the area of technical usage of the satellite dish equipment, respondents were asked to

rate their feelings of proficiency in using the technology. They were also asked to rate the support and help provided by Educational Media (central office that coordinates the media center program in the DeKalb County Schools) and the Satellite Help Desk in assisting with technical usage of the equipment. These questions were devoted to determining the level of support services provided for the media specialists and the need for further training or assistance.

The survey instrument was designed to determine barriers as well as facilitating factors that affected the taping of PeachStar programming. Questions addressing possible impediments to using satellite programming looked at areas such as copyright limitations, lack of relevant programming, inconsistencies in the published program schedule, and lack of teacher interest. Facilitating factors investigated the blockfeeding of programs, curriculum relevance, program length, and familiarity with a program series. Technical barriers were also investigated. These included not having the equipment in proper working order, not having a telephone near the satellite equipment for easily calling the Help Desk, and not having enough TV's and VCR's. Supply issues addressed storage space for taped programming and the availability of an ample supply of blank tapes for videotaping. Questions dealing with time factors targeted the time involved in barcoding/cataloging videos, previewing videos as well as the time involved in videotaping programming. Finally, media specialists were asked to rate the encouragement of the administration and the interest expressed by teachers as factors that influenced decisions to videotape.

Questions 5, 7, 9, 11, 12, and 13 addressed the factors that facilitated or acted as barriers in videotaping PeachStar programming.

3. *What educational programs are being videotaped by media specialists?*

This question looked at factors influencing the selection process as well as programs that had been taped by media specialists. Variables influencing the selection process included usage rights, program length and factors that influenced teachers in the selection process. Respondents were asked to check the program series that they had videotaped on a regular basis to determine usage by DeKalb County teachers. Questions 3, 14, 15, and 16 were specifically used to address the question of what educational programs had been videotaped by media specialists.

4. *Do demographic factors relate to the taping of PeachStar programming?*

A number of demographic factors were investigated for the purpose of determining whether years of service, type and size of school, staffing in the media center, and level of education attained had influenced the utilization of the satellite dish technology. Question 18 addressed this area.

Field Testing

The instrument was field tested by a group of five professional media specialists, representing four different counties, in the six-year research paper class at Georgia State University. Two media specialists from DeKalb County, one from Hall County, and one from Gwinnett County also field tested the instrument in another six-year class at Georgia State University. Sandy Glass, coordinator of Media and Instructional Technology in Gwinnett County, was also asked to

look at the survey because of her reputation and knowledge in the area of satellite dish technology. Suggestions made by these professionals were incorporated into the final survey along with input from Dr. Rosalind Miller.

Data Collection:

All 138 library media specialists in DeKalb County were sent a survey packet which contained the survey instrument, a cover letter explaining the project, and a self-addressed labeled courier envelope for returning the survey. Packets were mailed out on March 13 by the author. Respondents were asked to return the survey no later than March 30.

Educational Media, the office that oversees the media center program in the DeKalb County School System, has encouraged media specialists in the county to utilize the satellite technology. Because some media specialists might feel uneasy about confessing their lack of proficiency or use of the satellite dish technology, the information in the survey could be construed to be sensitive. Thus, confidentiality was a factor. The participants were given a new untraceable courier envelope with a label attached to provide only the information necessary for returning the surveys to the author. As these courier envelopes were new, they did not show any history of past mailings that might identify the participant. The label attached to the new courier envelopes also assured anonymity by providing only the information necessary for returning the surveys to the author. They did not indicate who was returning the survey. Media specialists were informed in the cover letter that a blank courier envelope with a label was enclosed to assure that strict anonymity would be followed. In late March, a general follow-up request was sent again

through the courier, to the library media specialists as a reminder to those who had not already responded. Assurances of confidentiality for the respondents were made in the cover letter and were honored in the final report.

Data Analysis:

Tabulation and analysis of data received from respondents was accomplished with the assistance of two computerized database programs: Epi Info 6.04b and SPSS 8.0. Upon receipt of each survey, individual responses were entered into a computer using the Epi Info software program. The surveys were numerically coded, and the hard copies filed in numeric order to be kept for reference during the tabulation and analysis stage of the project. After all the survey responses were entered into Epi Info program, the data was then converted into an SPSS program for running statistical frequencies and correlations. Before final tabulations were made, the data was verified and checked by comparing the electronic information to the survey questionnaires. The data requested on the survey instrument was tabulated using numerical counts reported by frequencies of occurrence. Correlations were run using nonparametric tests to determine how demographic information requested in the survey related to the taping of PeachStar programming.

CHAPTER 4

RESULTS OF THE SURVEY

The purpose of the study was to determine the use of the satellite dish equipment by media specialists in the DeKalb County School System for taping PeachStar programming. Survey questionnaires were sent to the 138 library media specialists in the DeKalb Schools. Responses were received from 112 media specialists or 81%. The media specialists at Fernbank Science Center and Coralwood Center did not have satellite dishes and therefore could not participate in the study. They returned their surveys, explaining that they did not have satellite dishes at the centers where they served. As a result, 110 or 80% of the DeKalb library media specialists were represented in the results of the study.

Research Question 1

What is the frequency of satellite dish usage and what tasks do media specialists perform in the overall usage of the satellite dish?

In order to determine the usage of the satellite dish equipment for taping PeachStar programming, the respondents were asked if PeachStar was utilized in their school. Out of 110 respondents, 94 (85.5%) stated that their school utililzed PeachStar programming and 16 (14.5%) responded that they did not utilize PeachStar programming. The respondents were also asked to

rate the frequency of videotaping that is done off the satellite dish. Table 2 shows the responses to this survey question. Most respondents, 39.1%, characterized the frequency of videotaping that was done off the satellite dish as "once a week or more" and 15.5% characterized the frequency of taping as daily. Thus, almost 55% of the library media specialists were taping once a week or more. Four media specialists responded that they used the satellite dish once or twice a year or never taped programs.

Table 2
Use of PeachStar Programming

Frequency of Use	**n**	**%**
Daily	17	15.5
Once a week or more	43	39.1
Once or twice a month	18	16.4
Once or twice every 2 or 3 months	13	11.6
Once or twice a year	2	1.8
Never	2	1.8

N = 110

The review of the literature revealed that media specialists are supposed to serve as an important link between PeachStar Education Services and the teachers in their schools, promoting and informing teachers about satellite programming. To determine if DeKalb library media specialists were practicing this role as defined in the literature, the respondents were asked what practices they use to inform teachers of PeachStar programming. Respondents were given eight choices to check off and an option to list any other methods they use for informing teachers about PeachStar programming. Tables 3 and 3.1 show the frequency of responses. Four answers received the most response: leaving a stack of Pipeline newsletters out for teachers to take (47.3%); personally showing Pipeline to interested teachers (46.4%); utilizing memos or

newsletters (42.7%); and announcements at faculty or department meetings (37.3%). One other answer stood out as being significant. More than 22% of respondents stated that they placed Pipeline in teachers' mailboxes. Despite the fact that this had not been offered as a choice under this survey question, twenty-five respondents wrote in this answer. Conceivably, this response could have been higher still if it had been offered as a choice. Other significant answers that the respondents wrote in were as follows: 9.1% stated that they distributed Pipeline to grade chairs or department heads; and 4.5% said they placed copies in the faculty lounge or copy room. Again, the responses listed in table 3.1 might have been higher if they had been offered as choices to check off.

Table 3
Practices Used to Inform Teachers of PeachStar Programming

Informing Teachers About Programming	**n**	**%**
1. Announcements – PA system	5	4.5
2. Announce – Faculty/dept. meetings	41	37.3
3. Inservice to Faculty	11	10
4. Leave stack of *Pipeline* out	52	47.3
5. Show *Pipeline* to interested teachers	51	46.4
6. Put out memos / newsletter	47	42.7
7. Demonstration	3	2.7
8. Do not inform teachers as a rule	2	1.8

N = 110

Table 3.1
"Other," Write-in Practices Used to Inform Teachers about PeachStar Programming

Other Ways Teachers Are Informed About Programming (listed by respondents)	**n**	**%**
Place in teacher mailboxes	25	22.7
Distribute *Pipeline* to grade chair/department heads	10	9.1
Place copies in lounge/copy room	5	4.5
Duplicate monthly schedule and distribute	1	.9
Inform teachers of taped programs	2	1.8

N = 110

To determine what role DeKalb library media specialists play in helping teachers select programming for classroom use, the respondents were asked how teachers select PeachStar programming in their schools (Table 4). The results for this survey question showed that 74.5% of teachers selected programming from reading Pipeline on their own. However, suggestions from library media specialists also impacted the selection of programming significantly (49.1%). Suggestions from other teachers and coordinators or central office personnel played a far less significant role in the selection process.

Table 4
How Teachers Select Programming

How Teachers Select Programming	n	%
Read *Pipeline* on their own	82	74.5
Suggestions from media specialist	54	49.1
Suggestions from other teachers	18	16.4
Suggestions from coordinators/central office	8	7.3

N = 110

The role of the library media specialist includes providing access to resources that meet the specific curriculum objectives of the school, including access to information in print and non-print format. To determine how DeKalb library media specialists have provided access to videotaped PeachStar programming, the respondents were asked to characterize their circulation and cataloging practices for videotaped programs. Table 5 shows the response to this survey question. Most respondents, 49.1%, reported that they did not barcode or catalog the videotapes and 12.7% responded that they only barcoded the tapes. The responses showed that most media specialists were not providing access to taped programming through the automated card catalog.

Table 5
Practices Used for Cataloging and Circulating Videotaped Programs

Circulation and cataloging Practices	**n**	**%**
View & fully catalog	6	5.5
Briefly catalog and barcode	23	20.9
Barcode, but do not catalog	14	12.7
Do no barcode or catalog	54	49.1

N = 110

To facilitate the usage of PeachStar programming, PeachStar Education Services offers two telephone services to help library media specialists tape programs: the Satellite Help Desk for technical support and a rebroadcasting service for programs that media specialists may have missed taping. Of the respondents, 44.5% reported using the Satellite Help Desk once or twice a year; 25.5% called the Help Desk once or twice every two or three months; and 10% reported calling once or twice a month. Most media specialists, 55.5%, had never used the rebroadcasting service, however. This response was followed by 15.5% which had used the service two to four times a year. The responses suggested that those who had tried the rebroadcast service found it satisfactory, using it more than once. Some wrote in comments stating that they had been unaware of this service.

Research Question 2

What factors facilitate or impede utilization of the satellite dish?

In order to provide PeachStar programming to their staff, library media specialists should feel proficient using the satellite dish equipment provided by the state of Georgia. To determine proficiency, DeKalb media specialists were asked to rate how proficient they felt in using the

satellite dish equipment. The majority of media specialists, 55.5%, felt "somewhat proficient" in using the equipment; 17.3% felt "very proficient"; 19.1% media specialists responded "not very proficient"; and 5.5% answered "not at all proficient." Thus, the results showed that while 73% feel proficient using the satellite dish equipment, almost 25% did not.

The Satellite Help Desk was clearly a facilitating factor. Seventy-three out of the 96 respondents that answered question 7 rated this service as very helpful. The survey results also showed that DeKalb media specialists felt they were receiving support from Educational Media, the department which coordinates the media center programs in the county. Support was being received from Educational Media primarily through memos (84.5%), staff development or workshops (70%), and technical help (37.3%). Efforts by Educational Media to check on usage of the satellite dish equipment received the lowest response (18.4%) and only 8.2% stated that no specific support was being given by Educational Media.

In order to assess possible impediments to the usage of the satellite dish equipment, DeKalb library media specialists were asked what factors might act as barriers to taping programs. The respondents were given twelve choices from which they could check off as many barriers as applied. Table 6 shows the frequency of the responses. The results showed that numerous factors were considered to be possible barriers to taping PeachStar programs. These included lack of time in the school day to tape (50.9%), minimal teacher usage for the effort required (48.2%), insufficient supply of blank videotapes (39.1%), and proficiency at utilizing the satellite dish equipment (38.2%). These were rated as the strongest barriers followed closely by copyright limitations (30.9%), not having a telephone near the equipment to easily call the Help Desk (29.1%), and inconsistencies between the published schedule and actual broadcast (27.3%). Nineteen percent of media specialists also cited lack of storage space for videotapes and missing

or non-working equipment as barriers. Two of the respondents also added their own perceived barrier: "teachers do not request taping." Few perceived the programming offered by PeachStar as a barrier, however, as less than 10% checked lack of appropriate programming or lack of new programs to tape. The responses suggested that in all areas other than the content of the programming, media specialists perceived strong logistical barriers to taping programming.

Table 6
Possible Barriers to Taping Programs off the Satellite Dish

Possible Barriers to Taping Programs	**n**	**%**
Proficiency at utilizing equipment	42	38.2
Copyright limitations	34	30.9
Lack of appropriate material	10	9.1
Lack of new programs to tape	8	7.3
Lack of time to tape	56	50.9
Insufficient supply of blank videotapes	43	39.1
Storage space for tapes	21	19.1
Teacher usage is too minimal	53	48.2
No telephone near the equipment for calling the Help Desk	32	29.1
VCRs do no have counters	11	10
Equipment is missing/not working	21	19.1
Inconsistencies between schedule and broadcast	30	27.3

. (Two media specialists wrote in another barrier – "teachers do not request taping.")
N = 110

Media specialists were asked what factors would facilitate more taping off the satellite dish. Table 7 shows the responses received. The respondents could select as many factors as they felt were applicable. The factor that was selected most often was having more programs with three years or more usage rights in order to facilitate more videotaping. This choice was selected by more than half of the respondents (53.6%). Copyright was clearly an issue that the media specialists had to contend with on a practical level. More than 43% of the media specialists felt that having a greater supply of tapes and more time to videotape would facilitate taping

programs. Over 30% of media specialists also felt that they might tape more programs if they were more proficient at using the equipment, had more time to videotape and preview the programs, and had more TV/VCRs available. Again, as had been shown in the results to other survey questions, at least one fourth of the DeKalb library media specialists felt more training would be helpful.

Table 7
Factors that would Assist Media Specialists to Tape More off the Satellite Dish

Factors that would facilitate more taping	**n**	**%**
Greater supply of video tapes	48	43.6
More programs with 3 years unlimited usage or more	59	53.6
New series/programs to tape	22	20
More time to videotape	48	43.6
Greater proficiency at using equipment	37	33.6
More TV/VCRs for viewing tapes	35	31.8
More time to preview the videotapes	34	30.9
More storage space for tapes	23	20.9
More time to catalog or barcode videos	28	25.5
Equipment in proper working order	16	14.5
Hands-on training on how to use the equipment	30	27.3

N = 110

Respondents were asked to rate ten different factors that might influence their decision to videotape programs. Table 8 shows the frequency of responses. Interest expressed by a teacher (78.2%) and relevance to the curriculum (77.3%) were the most important factors in influencing the decision to videotape. Once again, as had been shown in the results for previous questions, having an ample supply of blank videotapes was important (47.3%) and so was the length of copyright usage (37.3%) as factors affecting the decision to videotape. The program length and the time involved in barcoding or cataloging tapes were not rated as important factors when deciding to videotape. Blockfeeding of programs was rated as very important by 29.1% of respondents and somewhat important to 34.5%.

Table 8
Importance of Factors in Deciding to Videotape

Factors affecting decisions to videotape	Very Important	Somewhat Important	Not Important
Program length	14.5%	26.4%	40.9%
Relevance to curriculum	77.3%	6.4%	0.9%
Ample supply of blank videotapes	47.3%	23.6%	10%
Interest expressed by teacher	78.2%	8.2%	0.9%
Time involved in barcoding/cataloging	8.2%	20.9%	51.8%
Program is part of known series	22.7%	36.4%	20.9%
Length of copyright usage	37.3%	30.9%	16.4%
Encouragement of administration	23.6%	28.2%	29.1%
Blockfeeding of programs	29.1%	34.5%	18.2%
Having VCRs with counters for taping multiple programming	21.8%	27.3%	31.8%

N = 110

Research Question 3

What educational programs are being videotaped by media specialists?

This research question looked at the likelihood of taping programs with various copyright limitations, the length of programs preferred by teachers, and those series that have been taped on a regular basis. DeKalb library media specialists responded that they would be very likely to tape programs with unlimited rights (72.7%), three years rights (71.8%), or one year's worth of rights (43.6%) (see Table 9). When asked about taping programs with short usage rights, 39.1% chose "not likely" for three months rights and 51.8% chose "not likely" for programs with 10 days rights. The video length teachers preferred or requested the most was 31 to 60 minutes

(39.1%), followed closely by 30 minutes or less (35.5%). Videos running longer than 60 minutes were chosen by only 6.3% of respondents.

Table 9
Likelihood of Taping Programs with Various Taping Rights

Usage Rights	Very likely	Somewhat likely	Not likely
Unlimited rights	72.7	10.0	1.8
3 years rights	71.8	11.8	0.9
1 year rights	43.6	38.2	2.7
6 months rights	20.0	34.5	27.3
3 months rights	14.5	29.1	39.1
10 days rights	9.1	22.7	51.8

N = 110

PeachStar offers a variety of programming in various subject areas for different grade levels. To determine which programs were being utilized, the respondents were asked to check off those series that were taped on a regular basis. Table 10 shows the responses received. The Magic School Bus was the most popular series. This series was taped regularly by 49 media specialists (44.5%). It was followed closely by Reading Rainbow (38.2%), Arthur (34.5%), Bill Nye, the Science Guy (32.7%), and Georgia Stories (30%). Other programs that were significantly taped included Georgia Stories II, Wishbone, Count On It!, and Galaxy: The House. All of these series were geared for the elementary grades with the exception of Georgia Stories, Georgia Stories II and Bill Nye, The Science Guy which were used in both elementary and middle schools. Respondents were also given the option of listing other programs that they had taped on a regular basis besides the forty-one that were listed in the survey. Table 10.1 lists the programs that the DeKalb library media specialists added under the category of "other programs taped."

Table 10

Series Taped on a Regular Basis (listed in order of most taped to least taped series)

Series Taped	**n**	**%**
The Magic School Bus	49	44.5
Reading Rainbow	42	38.2
Arthur	38	34.5
Bill Nye, the Science Guy	36	32.7
Georgia Stories	33	30.0
Georgia Stories II	29	26.4
Wishbone	29	26.4
Count On It!	22	20.0
Galaxy: The House	20	18.2
Coastal Naturalist	18	16.4
Galaxy: Fixer Uppers	16	14.5
Math Talk	15	13.6
Galaxy: S.N.O.O.P.S.	12	10.9
Salsa	10	9.1
Die Deutschstunde	8	7.3
Drug Abuse & Human Physiology	8	7.3
Integrated Science	8	7.3
SuperScience with Molly & Bert	8	7.3
Futures	7	6.4
Newton's Apple	7	6.4
Eddie's Files	6	5.5
Science Quest	6	5.5
TEAMS	6	5.5
Galaxy: Science Professional Development	5	4.5
MATHLINE	5	4.5
World of Chemistry	5	4.5
Art Journeys	4	3.6
Economics	4	3.6
French in Action	3	2.7
Galaxy: Language Arts Professional Development	3	2.7
Irasshai: Japanese 1	3	2.7
Irasshai: Japanese 2	3	2.7
Integrated Math	3	2.7
What's in the News? Space	3	2.7
Beyond Chalk: Teaching With Technology	2	1.8
Kratts' Creatures	2	1.8
Different & the Same	1	.9
Finders Seekers, Science Keepers	1	.9
Looking From the Inside/Out	1	.9
Statistics: Decisions Through Data	1	.9
World of the Wild	1	.9

N = 110

Some of the respondents listed other series that they have taped besides the 41 that were listed as choices in question 16. These series are listed below. Bush Babies, Wonders Under The Sea, and Scientific American Frontiers were listed by two different media specialists. All of the other series listed below were listed once.

Table 10.1
Other Series Listed By Respondents:

Bush Babies	*Wonders Under the Sea*	*Scientific American Frontiers*
Battlefied Series	*E Connection*	*In Black & White*
Images of Germany	*Jazzmakers*	*Lewis and Clark*
Kid Science	*Math Is Elementary*	*Multiple Choice*
Nova	*The Odyssey of Life*	*Read On From Cover to Cover*
Pappyland	*Real Science*	*Science and Technology*
Science Is Elementary	*Shamu TV*	*Storytime*
Under the African Sun	*Visions of Africa*	*The West*

Research Question 4

Do demographic factors relate to the taping of PeachStar programming?

The population surveyed included all media specialists in the DeKalb County School System with satellite dishes in their schools. Only one of the 110 respondents was not a media specialist. This respondent was a media clerk. In terms of educational level, the majority of library media specialists had attained a masters degree (77.3%) and 20% held a specialist degree (see Table 11). Questions concerning their school situation looked at the number of staff members in each media center (see Table 12 and Table 12.1), the size of the school (Table 13), and the grade levels of the school (see Table 14).

Table 11
Level of Education Attained by Respondents

Degree	n	%
Bachelors	1	.9
Masters	85	77.3
Specialist	22	20
Ph.D	1	.9

N = 109

Table 12
Number of Clerical Staff Members in the Media Center

Clerical Staff	n	%
½ time clerk	19	17.3
1 full time clerk	80	72.7
1 ½ clerks	1	.9
2 full time clerks	5	4.5

N = 110

Table 12.1
Number of Library Media Specialists in the Media Center

Library Media Specialists	n	%
1 library media specialist	70	63.6
2 library media specialists	39	35.5
3 library media specialists	1	.9

N = 110

Table 13
Size of Schools Reporting

School Size	n	%
Less than 500	15	13.6
500 – 1000	52	47.3
1,001 – 1,500	35	31.8
1,501 – 2,000	8	7.3
Over 2,000	0	0

N = 110

Table 14

Grade Level of Schools Reporting

Grade Levels	n	%
Elementary	69	62.7
Middle	15	13.6
Secondary	26	23.6

N = 110

To determine if there was a difference in the frequency of taping that had been done in elementary and secondary schools, a Mann-Whitney test was used. The difference between elementary and secondary schools for the frequency of taping was statistically significant at the .05 level. The elementary schools taped more frequently than the secondary schools combined. The categories for middle schools and high schools were collasped into a new category that was labeled "secondary." This was the grouping applied within the DeKalb school system as both received the same proportionate funding and staffing in the county. Descriptive analysis showed that elementary schools taped on average once a week or more and secondary schools taped taped from once or twice every two to three months up to once a week or more. Elementary schools appeared to be more consistent in terms of taping on a regular weekly basis. Over 35% of elementary schools used the satellite dish once a week or more to tape programming versus 10.8% of secondary schools. The results also showed that elementary schools were more apt to tape daily (12.9%) than the secondary schools (5.4%).

Table 15
Frequency of videotaping by elementary schools and secondary schools

Videotaping Frequency by Schools	Elementary schools %	Secondary Schools %
Once or twice every two/three months	6.5	9.7
Once or twice a month	9.7	9.7
Once or a week or more	35.5	10.8
Daily	12.9	5.4

N = 93

A T-test was used to determine if there was a difference between elementary and secondary schools for the number of series that had been taped on a regular basis. The results showed that there was significant difference in the amount of series that were taped in each type of school. Elementary schools had taped on average between five or six on a regular basis in contrast to secondary schools that had taped an average of four series. This supported the results showing that elementary schools utilized the satellite dish technology more than secondary schools.

Table 16
Average Number of Series Taped by Elementary and Secondary Schools

Number of Series Taped	**n**	**Mean**
Elementary schools	62	5.6
Secondary schools	33	4.0

N = 95

To determine if there was a difference between the size of schools and the number of ways used to inform teachers about PeachStar programming, a Kruskal-Wallis test was used. The results showed that there was a statistically significant difference ($p < .05$). Schools with a population of less than 500 students generally used one or two methods for informing teachers. Schools with 500 to 1,000 students and schools with more than 1000 students usually used two or three different methods for informing teachers. Overall, media specialists generally reported that between two to three ways were used to inform teachers of programming. Table 17 shows the frequencies of responses by size of schools.

Table 17
Relationship Between Number of Ways Used to Inform Teachers and Size of Schools

Number of ways used to inform teachers	Less than 500 students	500 to 1,000 students	1001+ students
0	2	4	2
1	6	6	5
2	4	17	11
3	2	12	10
4	-	2	5
5	-	1	2
6	-	1	-
7	-	1	-

N = 93

A T-test was used to determine if there was significant difference between elementary and secondary schools for the total number of barriers endorsed. Table 18 shows the results. Although the results showed that there was no statistically significant difference between elementary and secondary schools for the total number of possible barriers, the secondary schools did report more barriers to taping programming. This is congruent with the previous findings and it is possible to hypothesize that the number of barriers reported contributes to the reduced number of taping. Descriptive analysis showed that lack of time to tape and minimal teacher usage were the most frequency reported barriers. These two barriers were endorsed by half of the library media specialists. The descriptive analysis also showed that copyright limitations and lack of proficiency at utilizing the equipment were also significant barriers.

Table 18
Mean Number of Barriers Endorsed by Elementary and Secondary Schools

Grade Level	n	Mean
Elementary Schools	66	3.28
Secondary Schools	40	3.60

N = 106

In comparing clerical staffing between elementary, middle, and high schools, the results showed that the elementary schools had more clerical help as is shown in Table 19. Again, it may be hypothesized that this was a contributing factor to less taping in the secondary schools as lack of time for videotaping had been reported as a significant barrier by DeKalb library media specialists.

Table 19
Number of Clerks Staffed by Grade Levels

Clerical staffing	Elementary	Secondary
None	-	5
One half-time clerk	12	7
One full-time clerk	51	29
One and a half clerks	1	-
Two clerks	5	-

N = 110

Table 20 shows the difference between proficiency and the level of education attained by the library media specialists. Although there was not a statistically significant difference between the two variables, library media specialists with master's degrees did report not feeling very proficient more often than those media specialists with specialist or doctorate degrees.

Table 20
Relationship of level of proficiency with degree attained by library media specialists

Level of Proficiency	Masters and below	Specialist and above
Not very proficient	26	2
Somewhat proficient	44	16
Very proficient	15	4

N = 107

Descriptive analysis showed that most media specialists had not cataloged taped programming. Table 21 shows the difference between elementary and secondary schools in terms of the circulation and cataloging practices used. Media specialists in the secondary schools reported cataloging tapes more frequently than elementary media specialists. The results also showed that secondary media specialists did a more thorough job in cataloging as some endorsed viewing the tapes in order to more fully catalog the programs. In contrast, none of the elementary school media specialists reported fully cataloging their videotapes. This practice may be reflective of the more specialized curriculum in the secondary schools. Secondary media specialists may perceive the need for more detailed access to the videotaped programs.

Table 21
Cataloging and Circulation Practices Used by Elementary and Secondary Schools

Cataloging and circulation practice	**Elementary schools**	**Secondary schools**
View and fully catalog tapes	-	6
Briefly catalog and barcode tapes	15	8
Barcode, but do not catalog tapes	11	3
Do not barcode or catalog tapes	37	17

N = 95

Chapter 5

INTERPRETATION OF FINDINGS

The purpose of this study was to determine the usage of the satellite dish equipment for taping PeachStar programming in the DeKalb County School System. A number of factors were examined in determining usage. These included the tasks involved, the role of the library media specialists as coordinators, programs that were videotaped, and factors that facilitated or impeded usage. Usage of PeachStar and the factors that affected utilization were determined by sending a survey questionnaire to library media specialists in the DeKalb schools.

This was a descriptive study of the usage of PeachStar programming by DeKalb library media specialists. Beginning in 1994, all public schools in Georgia received satellite dish equipment as a result of lottery funds that were appropriated by the Georgia legislature. PeachStar Education Services, a division of Georgia Public Broadcasting, has been responsible for providing instructional programming for the schools and keeping library media specialists informed of programming schedules through their Pipeline bulletin. To gather the needed data to measure the usage of PeachStar and role of the media specialist in promoting PeachStar programming, a six-page questionnaire was developed by the author.

Findings

With regard to the questions this study was intended to answer, the following can be concluded:

1. Most DeKalb library media specialists were taping PeachStar programming once a week or more, with usage highest in the elementary schools. The primary tasks involved in the overall use of the satellite dish involved taping programs once a week or more, distributing the Pipeline, informing teachers of programming through newsletters, memos or meetings, suggesting programs to teachers, and barcoding the videos.

2. The logistical factors impeding utilization of the satellite programming were numerous and perceived as strong barriers. They included lack of time to tape, minimal teacher usage, an insufficient supply of blank videotapes, lack of proficiency in using the equipment, and copyright limitations. Factors that might have facilitated more taping included having more programs available with three years rights or more, a greater supply of blank video tapes, more time to videotape, greater proficiency in using the equipment, and more TV/VCR's for viewing tapes.

3. Programs that were taped the most were elementary series. These included the The Magic School Bus, Reading Rainbow, Arthur, Bill Nye, Georgia Stories, Georgia Stories II, Wishbone, Count On It!, and Galaxy: The House. The exceptions were Georgia Stories and Georgia Stories II which were predominantly 8th grade programs, but were also being used in the 4th grade. Bill Nye and Wishbone were utilized by both elementary and middle schools as well. Most teachers preferred programs running 60 minutes or less, almost equally to

those running 30 minutes or less. The majority of media specialists were very likely to tape programs with three years rights or more. The likelihood of taping dropped when usage rights were less than three years.

4. The results showed that elementary media specialists utilized the satellite dish equipment more on a daily basis and on a weekly basis than secondary media specialists. Elementary media specialists had taped an average of five or six series on a regular basis in contrast to secondary media specialists who had taped an average of four series. Although secondary media specialists taped less frequently, they were more apt to catalog taped programs.

Discussion

The literature review revealed that the state of Georgia had spent over 12.3 million dollars in lottery funding to place satellite dishes in Georgia schools for purposes of taping PeachStar programming. The results of this survey showed that most DeKalb media specialists were utilizing the technology provided on a weekly basis or more. As DeKalb is one of the two largest school districts in the state, these results were significant for showing that the satellite dish technology provided by the state's lottery funds was being utilized.

DeKalb Media specialists did not perceive the programming offered by PeachStar to be an impediment or barrier to usage. However, the survey results showed that usage was highest in the elementary schools in terms of frequency of taping and the number of series taped. This was consistent with the results of the study by Beth Schapiro & Associates which showed that PeachStar programs were used more in the lower grades, with usage decreasing as grade levels increased. The reasons for less usage in the secondary schools, particularly high schools were

not examined in this study. It may be that elementary teachers felt that the programming offered fit their curriculum needs more appropriately or that greater flexibility in the elementary schedule allowed for more use of instructional videos. Secondary schools run on a tight bell schedule while elementary schools do not. The lack of planning time for elementary teachers might also have been a factor as videos may have provided teachers with needed breaks from teaching. Elementary school teachers teach a greater variety of subjects than secondary teachers who usually specialize in one subject area. Thus, they may feel the need for more supportive resources, while high school teachers felt less need for videos due to greater expertise in their more narrow teaching fields. The demands of curriculum in high school, particularly in the advanced classes may have left little time for video usage as well. The variables affecting usage in the two types of schools are numerous and suggest that further study is needed.

The review of the literature revealed that the theoretical role of the library media specialist was that of a facilitator in coordinating and promoting the usage of PeachStar. In this role, media specialists were expected to inform teachers of programming, tape programs, and provide access to taped programs. The survey results revealed that most media specialists were using two or three methods to inform teachers about PeachStar programs as well as taping programs once a week or more. Distribution of the Pipeline newsletter was the most frequently used method of informing teachers about PeachStar programming, and this was generally accomplished by leaving a stack of Pipeline out for teachers to personally take, showing Pipeline to interested teachers, or by placing the newsletter in teacher mailboxes. Teachers selected programming mostly by reading Pipeline on their own, although suggestions from the library media specialist were also important in the selection process. Some DeKalb media specialists also took the initiative in informing teachers of programming by putting out their own memos or

by making announcements in faculty or department meetings. Access to the taped programming was not being provided through the automated card catalog network, however, by most elementary media specialists, ironically, the group that taped the most. In contrast, most secondary media specialists had cataloged taped programs either briefly or fully, while none of the elementary media specialists reported fully cataloging taped programs. The contrast in cataloging practices may be reflective of the curriculum differences between the two types of schools. The specialized curriculum or programs being taped in the secondary schools may have necessitated more detailed access to videotaped programs. The size of the collections in the secondary libraries may also have been a factor as high schools contain larger print and nonprint collections. This may have necessitated more detailed access to taped programming as well. The results raised the question of how elementary media specialists were providing access to taped programming in terms of storage and retrieval since the tapes were not being assigned Dewey Decimal numbers nor was cataloging information being entered into the school's database.

The constraint of time was clearly perceived as a major logistical barrier to taping programs, according to the results of the survey and the comments of the DeKalb library media specialists. In the secondary schools, most media specialists reported having less clerical staff than elementary media specialists to help run and manage their media centers. This may have been a factor that contributed to less video taping in secondary schools as lack of time was clearly an issue for DeKalb media specialists.

Mimimal teacher usage was reported as the second largest barrier to taping programs. Since few media specialists perceived the programming offered by PeachStar as a barrier, the reasons for this were unclear. This raises questions concerning the methods used for promoting

and informing teachers about PeachStar programming. It may be that the practices used were not sufficient or were not consistently used by the library media specialists. Accessible access to the taped programs may also have been a factor as most DeKalb media specialists reported that they were not cataloging the tapes.

Supply and equipment issues were also perceived as impediments to usage. Almost one third of the media specialists reported needing more TVs and VCRs in their schools for teachers to use taped programming. Most significant, however, was the need for blank videotapes. Forty-seven percent of the media specialists reported that their supply of blank videotapes affected their decision to tape programming. Even in view of the inexpensive cost of blank videotapes, it was not surprising to see that this acted as a barrier to taping, as this probably reflected the greater issue of not having enough funding in the schools for consumable supplies.

The survey results showed mixed results about the affect of copyright limitations on taping programs. The number one factor that most media specialists felt would facilitate more taping was to have more programs with three years usage right or more. While most media specialists felt having longer usage rights would facilitate more taping of the satellite programming, they also stated that the length of copyright usage would generally not affect their decision to tape a program if a teacher expressed interest in a program. This suggested that perhaps usage rights were more of a practical (or nuisance) factor than one that acted as a true barrier.

The level of proficiency reported by DeKalb media specialists in using the satellite dish technology varied somewhat in the results of the survey. Thirty-eight percent reported that proficiency was a barrier, yet only twenty-five percent rated themselves as not feeling proficient in using the equipment. In a third survey question that addressed proficiency, thirty-four percent

said that greater proficiency would enable more usage of the satellite dish. While it was clear that one-fourth of the media specialists were not proficient in using the technology, it was not clear if that figure was higher as one question revealed that thirty-four percent needed more training and another question revealed that thirty-eight percent felt more training would be helpful. It was clear, however, that the Satellite Help Desk was considered to be a very helpful service for helping DeKalb media specialists utilize the equipment, although one-third of the library media specialists did not have a telephone near the satellite dish to easily call the Help Desk.

Areas for Further Study:

This study offers areas for possible further study regarding the use of the PeachStar programming. The Metro Atlanta area accounts for most of the population of Georgia. A study of PeachStar usage in the other Metro Atlanta school systems would give a better understanding of its usage in the Atlanta area. This would also help to validate or provide differing results than this study provided. A study of utilization statewide comparing usage by rural and metro areas would provide information for determining if usage is greater in rural areas as was suggested by PeachStar's executive director, Joey Baughman. In this study, DeKalb library media specialists reported numerous possible barriers that impeded the usage of the satellite dish technology provided by the state. Further study would be needed to determine what factors are perceived to facilitate or impede usage by Georgia media specialists outside DeKalb County.

The difference in usage between elementary and secondary schools suggests further study is necessary for determining the reasons for less usage in the secondary schools. Further study

would hopefully reveal ways to increase usage in the higher grade levels. This study did not address those subject areas for which DeKalb library media specialists felt more instructional television programming was needed. As media specialists are involved in supporting all areas of the curriculum, additional studies would be appropriate to determine the specific curriculum needs that media specialists feel PeachStar programming might be able to support. The survey results showed that teachers were informed about available programming through a variety of methods, some that the questionnaire did not include. This is an area that also needs further examination, as this is a key part of the coordinating role that library media specialists are expected to provide. Nor did this survey ask media specialists their thoughts on the Pipeline newsletter. It would be helpful to see how this publication was perceived by media specialists in terms of meeting their needs, as this is the primary communication vehicle between PeachStar and the library media specialists.

Little has been written on PeachStar and the role of Georgia Public Broadcasting in Georgia. Georgia is a leader in instructional television in many regards as a result of lottery funding and support from the Georgia legislature. Despite the large deployment of satellite dishes to all Georgia public schools in 1994, little has been written on this topic. The Carl Vinson Institute of Government at the University of Georgia is expected to release the results of their study regarding PeachStar usage by the fall of 1998. This study, funded by the Georgia legislature, should help to provide needed information concerning the usage of PeachStar statewide as well as add to the literature base on instructional television in Georgia. Further information also needs to be sought from Joey Baughman and others that have been instrumental in furthering the role of Georgia Public Broadcasting and PeachStar. Obtaining a more detailed

oral history of their knowledge and involvement in ITV would help provide a better literature basis for examining the role of PeachStar in Georgia.

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Appendix A

Survey Questionnaire
and
Cover Letters

Satellite Dish Usage: A Survey of Library Media Specialists in the DeKalb County School System

Important:

Please return your completed questionnaire through school courier by April 3 to:
Betsy Razza, Stone Mountain Middle School
(770-879-8765)

Please fill out the following statements by checking the appropriate spaces.

1. **We utilize PeachStar in our school:**
   ___Yes - Please proceed to question 2 and answer the entire survey.
   ___ No - Please answer questions 5, 9, 11, 17, and 18 if appropriate.

2. **What practices do you employ to inform the teachers about the satellite programming available from PeachStar? (Check all that apply.)**
___Announcements over PA system
___Announce at faculty meetings / departmental meetings
___Inservice to faculty
___Leave stack of *Pipeline* out for teachers to take
___Show *Pipeline* to interested teachers
___Put out memos / newsletters
___Demonstration
___Other (explain) _____

___Do not inform teachers as a rule

3. **How do teachers primarily select the programming they wish to have videotaped?**
___ From reading Pipeline on their own
___ From suggestions given by the media specialists
___ From suggestions given by other teachers
___ From suggestions given by central office personnel or curriculum coordinators

4. **Which of the following characterizes the frequency of videotaping that is done off the satellite dish (Select one.)**
___Daily
___Once a week or more
___Once or twice a month
___Once or twice every 2 or 3 months
___Once or twice a year
_Never

5. **How proficient do you feel in using the satellite dish equipment?**
___Very proficient
___Somewhat proficient
___Not very proficient
___Not at all proficient

6. **When trying to videotape and use the satellite dish, how often have you called the Satellite Help Desk?**
___Daily
___Once or twice a week or more
___Once or twice a month
___Once or twice every 2 or 3 months
___Once or twice a year

7. **When calling the Satellite Help Desk, how helpful have you found the service?**
___Very helpful
___Somewhat helpful
___Not very helpful service
___Have not used this service

8. **How often have you called PeachStar to arrange for a special rebroadcast of a program you missed taping?**
___8 or more times a year
___5 to 7 times a year
___2 to 4 times a year
___Once a year
___Never

9. **How does Educational Media support use of the satellite dish? (Check all that apply.)**
____Staff development / workshops
____Memos
____Provides technical support
____Checks on usage
____No specific support

10. Which of the following characterizes the library's circulation and cataloging practices in your school for videotaped programs?

___Try to view and fully catalog the tapes
___Briefly catalog and barcode the tapes
___Usually barcode the videotapes, but do not catalog them
___Videotapes are not barcoded or cataloged

11. Which of the following present possible barriers to taping programs off the satellite dish (Check all that apply.)

___Proficiency at utilizing satellite dish equipment
___Copyright limitations
___Lack of appropriate material
___Lack of new programs or series to videotape
___Lack of time in the school day to videotape
___Insufficient supply of blank video tapes
___Storage space for taped programming
___Teacher usage is too minimal for the effort required
___No telephone near the satellite equipment to easily call the Help Desk
___VCR's do not have counters - can not tape multiply programs on one videotape
___Equipment is not working / missing
___Inconsistencies between published schedule and actual broadcast

12. Which of the following would assist you more in videotaping off the satellite dish? (Check all that apply.)

___A greater supply of blank video tapes available
___More programs offered with 3 years unlimited usage or more
___New series or programs to videotape
___More time in the school day to videotape
___Greater proficiency at using the satellite equipment
___Having more TV/VCRs available for viewing videos
___More time in the school day to preview the videos
___More available storage space for the videotapes
___More time in the school day to catalog or barcode the videos
___Having the equipment in proper working order
___Hands-on training on how to use the satellite equipment

13. **Rate the importance of the following factors in deciding to videotape.**

	Very Important	Somewhat Important	Not Important
a. Program length			
b. Relevance to curriculum			
c. Ample supply of blank videotapes			
d. Interest expressed by teacher			
e. Time involved in barcoding/cataloging			
f. Program is part of a known series			
g. Length of copyright usage			
h. Encouragement of the administration			
i. Blockfeeding of programs			
j. Having VCR's with counters for taping multiple programs			

14. **Indicate how likely you are to videotape programs that have the following usage rights.**

	Very Likely	Somewhat Likely	Not at all Likely
Program with unlimited rights			
Program with 3 years rights			
Program with 1 year rights			
Program with 6 months rights			
Program with 3 months rights			
Program with 10 days rights			

15. **What length video do teachers prefer or request the most?** (Select one.)

____91 minutes or more
____61 minutes to 90 minutes
____31 minutes to 60 minutes
____30 minutes or less

16. **Which of the following series have you taped on a regular basis? (Check all that apply)**

1 Georgia Stories
2 Georgia Stories II
3 Bill Nye, The Science Guy
4 Wishbone
5 Kratts' Creatures
6 The Magic School Bus
7 French in Action
8 Salsa
9 Irasshai: Japanese I
10 Irasshai: Japanese II
11 Reading Rainbow
12 Arthur
13 Art Journeys
14 Economics
15 Statistics: Decisions Through Data
16 Futures
17 TEAMS
18 Different & The Same
19 Die Deutschstunde
20 Beyond Chalk: Teaching With Tech.
21 Galaxy: Science Professional Development
22 Galaxy: Lang. Arts Professional Develop.
23 Eddie Files
24 Newton's Apple
25 Galaxy: Fixer Uppers
26 Galaxy: The House
27 Galaxy: S.N.O.O.P.S.
28 MATHLINE
29 Math Talk
30 Count On It!
31 Integrated Math
32 Integrated Science
33 Finders Seekers, Science Keepers
34 Science Quest
35 What's in the News? Space
36 SuperScience with Molly & Bert
37 World of the Wild
38 Looking From the Inside/Out
39 Coastal Naturalist
40 Drug Abuse & Human Physiology
41 World of Chemistry
42 Other programs taped:

_____
_____
_____
_____

17. **Other comments you would like to make regarding any aspect of using the satellite dish: (Optional)**

_____
_____
_____

18. About you:

What is your gender?
_____Male _____Female

What is your position in the school?
___media specialist ___clerk ___other (explain)_____
___teacher ___student

How long have you been in your current position?
____less than 2 years ____2 to 5 years ___6 to10 years ___more than 10 years

Indicate the number of staff members in the media center.
____ clerical
____ media specialists (including yourself if you are a media specialist)

What is the size of your school:
____less than 500 ____500-1000 ___1,001-1,500 __1,501-2,000 __over 2,000

What grade level is your school?
____elementary ____middle ____secondary

What level of education have you attained?
____bachelor's degree ____master's ____specialist ____Ph.D

Return Directions:

Please return by April 3 to
Betsy Razza,
Stone Mountain Middle School
by way of courier envelope.

Thank You!

March 23, 1998

Dear Colleague,

In 1994, we received satellite dish equipment through lottery funding. I am conducting a study on the usage of the satellite dishes and PeachStar programming by library media specialists in DeKalb County. The enclosed questionnaire has been designed to investigate the practices and opinions of media specialists as well as those factors that facilitate or impede the usage of this technology.

This study, part of the requirements for an Educational Specialist degree in Library Media Technology at Georgia State University, will be helpful to Educational Media and Georgia Public Broadcasting in determining the needs and problems of media specialists. The survey will also be helpful in determining how to provide better support for media specialists.

Please take a few minutes and complete the attached survey. Strict anonymity will be maintained; only the cumulative results will be published. In order to assure total anonymity, a blank courier envelope with an attached label is enclosed. **Please return the completed survey via school courier by April 3.**

Thank you for participating in this study.

Sincerely,

Betsy Razza

Betsy Razza
Library Media Specialist
Stone Mountain Middle School

April 13, 1998

Dear Colleague,

About three weeks ago, I sent you a questionnaire regarding the usage of the satellite dish for taping PeachStar programming. As a library media specialist, I know we are busy people and perhaps it has become lost in the shuffle of paper that always comes with the job. I have enclosed a second copy of the questionnaire in the event the first copy was misplaced.

I would appreciate ten minutes of your time to complete this questionnaire. Thank you for assisting me. If the questionnaire has already been completed and sent, let me apologize for this reminder.

Sincerely,

Betsy Razza
Stone Mountain Middle School

Appendix B

Respondents' Comments from Questionnaire

APPENDIX B

Comments from Question 17 (Other comments you would like to make regarding any aspect of using the satellite dish)

Cable is available in DeKalb that overlaps most programs. We often view "live" or tape at home. Additionally, Mr. Cantrell's department will tape programs for us if we send in blank videotapes.

Pipeline should come on a more timely basis and not after the month has passed. though we have VCRs and counters unless someone is there when program ends, its not recorded on the tape (automatic timers on VCRs (new?) would help.

Teachers feel they already have so much to do that they don't take time to look at PeachStar Pipeline to discern details about particular programs. The few who are interested want the Media Specialist to tape <u>everything</u> in a series.

It takes time to utilize your equipment and program shows efficiently. Along with this entails public relations of the programs for viewing by teachers and students.

I wish Media Production could be responsible for all taping for the high school level since we don't have to do taping that often and certainly don't have the time.

This year we have one teacher who requests programs taped (over the weekend). I don't believe they are taped for class, but for personal viewing.

The programs on the satellite are mostly good. Unfortunately, many of the teachers do not take advantage of what is available for their students.

I would appreciate seeing staff development/inservices for teachers on the materials available via satellite. Also encouragement from their instructional departments.

Obtaining guides is time-consuming, difficult and costly. If PeachStar could keep a supply of all guides and sell to us, it would help. I don't have money now to buy guides for spring taping.

1. I no longer use the turning feature of the dish, since doing so will render the second VCR unusable for taping because the PeachStar signal is gone whenever I move the dish to the new setting. This is frustrating at times.
2. I've tried locating OVATION network on the satellite but the settings (in SATLINK) do not work. Have e-mailed them but no reply yet.

There are so many demands on the media specialist, taping gets pushed to the bottom of the priority list especially when equipment doesn't work and you must spend hours on the helpline. Changing tapes all the time for different series is also a nuisance.

Block feeds especially of short programs are great. Longer usage rights would be great.

Copyright is always an issue, since teachers don't seem to take it seriously. Time is the big problem – pulling tapes, reprogramming equipment, etc. No one else in our school is able to program a VCR, so it seems.

There are some excellent programs available. I think once I am proficient in doing the taping my next priority is to "hook" teachers on using materials by being guided to appropriate programs. I am hoping they will follow up by previewing the calendars themselves and get in the habit of looking for curriculum support in this area.

I have also taped several Channel One classroom channel programs during March and also have requests for some of the April programs. The teachers appreciate these additional resources, but sometimes I get busy and forget to program the VCR and tape. It is very difficult with everything else we are expected to do, to find time to view, catalog, barcode, and label the tapes for use, but I feel this is necessary to let the teachers know what is available.

The satellite taping should be part of the TSS's job and all videos sent to the media center for processing and storage.

Teachers often feel curriculum leaves little time for video use. Taping is usually done when there is a teacher request. Media specialists sometimes tape a program they feel will be useful (used to do this more, but tapes accumulated without use) or point out an upcoming program. Time is the biggest constraint for teachers and media specialists. We also have a substantial video collection of our own and the county LRC collection is widely used.

I have enlisted parent help in videotaping.

One thing I consider before taping is whether something is available in my present collection or at Jim Cherry which will serve the same purpose. If my clerical help could do this I would tape more, but I feel that my time is better spent with the students. When deciding on a task my students come first.

We just need more time and to have ideas on how to work it in our schedule.

I' m sure we miss many opportunities because there are so many demands on our time. But, I'm glad we have the technology!

Teachers would use programs from the satellite in they had television sets in their classrooms or if we had a video distribution system. (I know you will have success with your research. Very good survey.)

It would really help if block feeds could be scheduled more often. My set-up is in a classroom and I can't change tapes during the day.

Satellite programming is a great resource – I wish I had more time to utilize it!

One little 30 minute session with Pat Pickard in not enough training! I need a real workshop of a few hours or more!

I would love for someone to come to my school and give me an individual lesson on the use of the satellite equipment – and how to set it up properly. I need to "learn by application" as opposed to sitting in a class and hearing about it – my understanding is very low!

Cable TV with educational access requirements and the related developing technologies are more than adequate in most school situations. Satellite use has been made unnecessarily convoluted and cumbersome. It is a waste of taxpayer dollars. A few of the PeachStar offerings are good and could have been provided to smaller school systems as master tapes for dubbing. Distance learning has some uses in special situations. The teleconferencing possibilities may have some district-level applications, but is not essential in most building level settings. The efforts and monies wasted with this should have been directed toward more useful areas – e.g. Internet and LAN needs and basic needs such as overheads.

Most programs requested are available through our cable connection so we usually tape from it (better program sources that all teachers can easily access.) Value of satellite to us is for foreign broadcasts.

It is so necessary to get TV's and VCR's in each classroom. I would "make" the time to do more with the satellite if more teachers had easy access to TV's and VCRs.

My time limits me in taping and in talking with teachers – really, we did much more taping when we could batch the tapes and send them to Richard Cantrell.

The outside lines have been damaged. To move our dish I have to get a technical support person to come and run a line out to the satellite.

I make the person requesting taping provide the blank videotapes.

It seems like such a great idea, but it's just so cumbersome! Most days that wheel just doesn't squeak very loudly!

If each teacher had a VCR in his/her classroom, more requests would be made for ITV programs. Teachers have to reserve and share playback equipment. This is inconvenient.

Hire a technician to do this or just buy the tapes – example Georgia Stories. Who has time for "bells" to ding — it's time to record something else for "Fun Friday." Reteach the teachers how to effectively use videotapes in the curriculum. Check out county video resources that are great and can be used with a little planning on the teacher's part (what a novel idea?!).

Only a limited number of teachers ask for taping.

Survey was too long!

Very little interest from teachers – they do not have time to select programs; complexity of taping precludes spontaneous taping.

I primarily go by teacher request to avoid putting all my time into it. So far, there are limited series and individual programs wanted.

Limited taping due to scrambled channels.

Taping is sporadic - sometimes daily, sometimes no taping for several weeks.

Training on how to use the satellite equipment would be helpful. I loose a lot of time each time I tape.

Called PeachStar first time last week for special rebroadcast. Great service!

Difficulty using room where equipment is located as room is used by counselors and other county personnel. We never put multiple programs on a tape — too difficult to use.

We have had hardware problems and our equipment had to be replaced two different times. Media Productions (DeKalb County) has many PeachStar programs that we use. We can request from them instead of arranging for a special rebroadcast.

We will barcode tapes when time permits. Most tapes are used by the same teachers.

Our equipment has been broken 80% of the time since we received it. The help desk is a joke. They don't help. Educational Media needs to give more training and support. I have asked for help but get put off to another person time after time.

I'm not proficient because I don't use it enough – not because it's difficult. I don't use it mainly because of a lack of time, and the teachers prefer to use videos that are in the collection or those from Ed Media.

Not proficient at utilizing satellite dish equipment because of not-use. Very little clerical help. 4-8 hours a week, often less.

Hands-on training on how to use the satellite equipment would be helpful only if time to do it after training. Will forget otherwise.

Absolutely no time.

If asked before $ was designated for satellite dish, we could have given the state alternative purchases that would much better serve our needs.

Most programming is more easily available on cable TV.

I could use it more often than I do. I need to do another "promo" or inservice. Teachers will use what we promote.

Comments from Question 2 ("Other" practices you employ to inform teachers about the satellite programming available from PeachStar)

Put Pipeline in mailboxes of all teachers.

Put out memos / newsletters – as part of our regular memo occasionally.

Leave stack of PeachStar Pipelines by sign-in desk. Monthly notice to teachers when new Pipelines come in.

Distribute Pipelines in mailboxes.

I give out the Pipeline.

Go to individual teachers and inform them of specific programs.

Place Pipelines in boxes.

Distribute Pipeline to each teacher.

Put copy of Pipelines in homeroom teachers' boxes.

Provide each teacher with a copy of Pipeline.

Put Pipeline in the teachers's boxes.

Put copies of Pipeline in grade level chair boxes to be shared on grade level. Put copy in the lounge.

Give Pipeline to all teachers in mailboxes.

Place Pipeline in teacher's mailboxes, personal contact, Pipeline in copy room

Pipeline distributed to department heads.

Put copies of Pipeline in mailboxes.

Put Pipeline in boxes.

Pipeline is given to K-1 grade chairpersons and to all other certified personnel in mailboxes.

Duplicate the monthly schedule and place in every teacher's box.

Distribute Pipeline in the teachers' boxes.

Each month I put Pipeline in each teacher's mailbox.

Put copy of Pipeline in mailboxes or grade chairman's box when I don't have enough copies for each teacher.

Place extras in department chairpersons boxes, with instructions to share with departments.

Quarterly, I put Pipeline and a memo and a taping request form in their mailboxes.

Put Pipeline in teachers' boxes.

Inform teachers of tapes available recorded from satellite.

Put copies of Pipeline in teachers' boxes.

Taping and sharing.

Put Pipeline in their mailbox.

Put in mailboxes – Pipeline.

Give Pipeline to department heads and teachers on a rotating basis since we have many more teachers than Pipelines.

Each department and special area gets Pipeline.

Place copy in each teacher's box.

Pipeline distributed to department heads.

Place Pipeline in copying room and lounge and ask them to copy page, mark program, put name on paper and put in my box.

Distribute Pipline to all departments and tape relevant programs that I think would be used or would be helpful for instruction.

Appendix C

Interview with Joey Baughman, Director of PeachStar Education Services

Interview with Joey Baughman, Director of PeachStar Education Services
March 17, 1998

I know the lottery was authorized in 1992, but I have not been able to find a definite date when PeachStar began. Could you tell me what date PeachStar began?

There is probably no beginning date for PeachStar except that we began to broadcast to schools in the fall of 1994. Obviously, there was some planning that went on for months before, but schools did not know that PeachStar existed until the fall of 1994. This was the beginning of the broadcast to schools through the satellite system. From 1992 to 1994, the satellite dishes were authorized, then they were bid, purchased, and installed. I believe 2,200 satellite dishes were installed in the state. We began calling ourselves PeachStar right before the beginning of the 1994-95 school year.

From talking to Stephanie Caywood, I understand that the first issue of Pipeline came out in September of 1994. Is Pipeline published in conjunction with the Department of Education?

No, its primary purpose is to give programming information which would not be something the Department of Education would know anything about. We program from here and the stories in Pipeline elaborate on the scheduled programming.

Programming from GPTV used to published in Media Memo, did it not?

Yes, I don't know if Media Memo still exists. I go back to Media Memo days because I was with the Department of Education too. I don't know what happened to Media Memo. No, the answer to your question is that it is not published in conjunction with the Department of Education. I don't know what kind of publication they put out.

The Department of Education is not putting out anything for media specialists now. I spoke to Clara Keith and at some point Media Memo ended with Dr. Nancy Pacesinger. I believe she died in 1993 and I think 1992 was the last year for Media Memo, but Clara Keith could not give me an exact date.

I don't remember. I did not leave the department to come here until January of 1994 and we were not publishing Media Memo at that time. 1992 sounds right to me.

Was there a gap then between 1992 and 1994 in terms of programming information for media specialists?

Oh yes, there was a tremendous gap of information and publications and meetings. There was a huge gap that occurred there. When I came here, and I have always been here since PeachStar initially began, we were employees of the Department of Education, but responsible for the production of programming that ran on GPTV that was school related, so that has always been my job even though it was somewhat removed from the Department of Education. I think there is a misunderstanding of our role and your question almost indicates that misunderstanding. I think people feel that those of us who ended up here with Georgia Public Broadcasting carry that role for communication with the media centers and the media specialists with us. The only person that is left in the Department of Education now that was there at all during the time of the large media department in the Department of Education is Clara Keith. There were a number of people on my staff that were Department of Education employees and when we first came to Georgia Public Broadcasting, we tried very hard to do a lot of things which (although I am actually the only person that came from that Media Division), we had done in the Media Division such as doing workshops, going to schools, going to conferences, and trying to fill the role that the Media Division in the Department of Education had done. Finally, we realized in the last 18 months that that was not our mission. We are not the Media Division of the Department of Education. We are a satellite delivered and open air delivered instructional materials network. But, I think that there is that misconception. People call us as they used to call us when we were in the Department of Education and we are not the Department of Education.

And probably that misconception is there because Media Memo used to publish GPTV programming?

Yes, because we were together at that time. That Media Division broke up and went in four or five different directions. The media center related issues, not satellite or television related issues, I assume still rest with Clara Keith, bless her heart, in one person. We are that programming piece that you used to get in Media Memo, but much, much more so than we were before the satellite system went up.

How do you think it came about that media specialists were chosen to be the ITV resource people in the schools?

As far as PeachStar is concerned, I think a lot of that comes from me. If it is right or wrong, I will still take credit for it. I think, when I was a part of the Media Division in the Department of Education that we felt, and I think rightly so, that the media specialist was the key to the resources for teachers. You can't go in with a spray gun approach. There has to be someone that is the gatekeeper for the materials and information, and I was very used to that and the staff was very small here in the beginning and they were print or television people and not school people. So, I think at that point if I had said that the Pipeline needed to go through the director of buses, the staff would have accepted that because there just wasn't anyone here that had the school background. It was so logical to me. That was where we had sent materials through the Department of Education and that was a working situation. The equipment is in the media center. The scheduling of that equipment comes through the media center in a school, and it just seemed logical that was our door into the school. The other doors like the principal, that person is focused on a whole host of issues, not only instruction and mechanical, but a whole host of things, where the function of the media specialist is to manage the resource center of the school. I just think that is where it should go. I think it just seems logical.

You Are the Key from the Department of Education spells out that coordinating ITV is part of the media specialist's role. Do you know how this started in the Department of Education?

When you have been around as long as I have, you have seen the whole process grow. The whole focus in the Department of Education was towards building the media center as a center for information and that focus grew and grew and grew within the department. That focus goes back to the early 1980's. There was a combination of three or four of us that were in that division at that time. Nancy Pacesinger's focus was the policies and procedures of the media centers and the training of the media specialists. My focus was the delivery of materials. Others looked at it from different aspects, but we all came together to make that Media Division within the Department of Education. I saw the Media Division grow from the library with Lucille and then later Nancy Pacesinger. The television and resource people were off in a separate building from us. The book people were over in another building and Max Wilson had been with me at GPTV. Then we were all transferred to the Department of Education, and Max was sort of responsible for bringing that library group who were strictly librarians, into forming a division that was focused on integrating television and print resources for the media specialists and media centers. And we moved from there, physically from there, when the commission was formed in 1982.

Do you know what influenced Governor Miller to put the satellite dishes in the schools? In one article, the Atlanta Journal Constitution stated that Governor Miller visited a rural school and he was impressed to see that the children were learning Japanese from satellite programming. The teachers did not know any Japanese, but the students were clearly learning the language and from that visit this cemented an idea that he had to put satellite dishes in the schools.

There are several stories there, all of which are true. He did visit a number of schools, by design or by accident, I'm not sure, where he did see Japanese being learned. I also took a group of kids from White County High School to visit the governor one day in the Capitol in his office. I asked those children not to speak English while we were there in his office, and they did not. He was so incredibly impressed by those kids that he even made the statement, "I need these kids to go on the road with me." He said, "You came from White County and that is just down the road from my home." I was there. I saw that happen and he was ecstatic. Also, Georgia was one of the founding members of SERC, the Satellite Educational Resource Consortium which

one of the very first distance learning providers. There were about four to six states initially. There are about 28 to 30 states now. The first thing SERC did was to get a federal grant to get started and then offered two courses in pilot situations across those states that were the founders. Part of the SERC federal grant was to put satellite dishes in those four schools. Being one of the founders of SERC, we had four schools in the state that participated in the Japanese programming that was being offered from Nebraska at that time by satellite. They took Japanese and an advanced math course. That was piloted for a year and the schools got the dish for free if they participated. The schools did have to pay a fee for their students because both courses they were offering were high school credit courses. Governor Miller was very, very aware of that going on because we kept him very aware of this. This was the beginning. Governor Miller is a sort of technical person and he likes all of that worldwide communication kind of thing. So, he was particularly interested in the satellite courses and then we were able to show him data as well.

I think what the article in the Atlanta Journal Constitution was referring to, and I know the story that was in the paper, was not that he visited a school, but that those kids came to the Capitol. We also brought a truck which we parked outside which brought in a signal from Nebraska. This made it possible to show the programming from Nebraska to the Senate committee. We brought the kids into the Senate and they actually took the course right there in front of the Senate Education Committee. They were able to see the kids taking the class. So, I think we exposed Governor Miller to this. I am not sure he would have known this if we had not kept this in front of him. But that day that they came into his office and he had his picture taken with them, he was beyond belief. His excitement was over the fact that the kids were getting this in rural Georgia. Three of our four sites, as I remember, with SERC were in rural areas and so that was very impressive to him. I am sure that there was other data that he had about what people were doing by satellite, but I think Japanese put him over the edge. He thought if kids in White County could learn Japanese by putting just a satellite dish in the yard why can't they learn a whole host of things by satellite. I think it was almost as simplistic as that. I don't think anyone gave him a lot of hard data about satellite classes. Obviously, Governor Miller is incredibly well read and knew that people were taking courses across the world by satellite and here this was shown to him in his own state. I think that was about all it took.

I think the Japanese course from Nebraska was so interesting too. Each day on his broadcast, Tim Cook wore a different sweatshirt from one of the schools that had sent him one. The kids up in White County had been so impressed by Tim Cook that they had had their own sweatshirts made. They had a whole host of things on the back of their sweatshirts written in Japanese and they wore them that day to see Governor Miller. They all wore their sweatshirts. And then another interesting thing, which I don't think was pointed out to me that day, but I know that Governor Miller knew about was the fact that White County was chosen as the site for a small Japanese business. One way White County sold this business was the fact that they had a work force that possibly could work for them that spoke some Japanese. That was good.

Does the funding for PeachStar programming come from the lottery money?

No, it does not come from lottery funding. The satellite dishes came from lottery funding, but the programming dollars are regular legislative dollars. Lottery dollars do not allow for programming, that is true wherever it is used. The three programs that the lottery goes into have to be nonconsumable dollars. They have to be capital investments such as computers, buildings, the satellite dishes, etc. The programming dollars come from a budget that we get from the legislature each year. In the past, we have also gotten some money from the Distance Learning and Telemedicine Act, but we will no longer get this because there is no money there. The Distance Learning and Telemedicine Act of 1992 set up the GSAMS system. There were some moneys from that and a small amount of that money went into our budget at one time. That no longer is there because there is no money there. Last year, we got a small amount of lottery money for the Galaxy project which is an elementary program. But the large bulk of our money, 90%, comes from regular legislative money. I think that is a general misconception, but the lottery funding is very strict in terms of what it can be used for. They do not want us to produce a program this year that will not be used next year. They do not want it to be used that way. The funding for this building came from lottery money, but programming money comes from the legislature.

Does PeachStar, in your opinion, produce more programming than other local public broadcasting stations?

Oh, yes. We produce more than Alabama, Mississippi, New Jersey or wherever because we have been very fortunate in having the legislative dollars to support the satellite system.

Has that been because of Governor Zell Miller?

Oh, I think that there is no question about that. I think he is our very best friend. We have been very fortunate. Because we have been able to produce quality programming on our own that has brought dollars into us. We have produced for the Educational Management Group of Phoenix. We were just approached by Simon & Schuster to produce for them. We are working with McGraw Hill now in collaboration with our Spanish program. By having had the dollars so far to produce quality programming, it has almost been like a magnet to bring in other sources.

So, this generates money...

Oh, yes, no question about it.

Are you selling programming such as Salsa around the country?

I love it when people say Salsa because they know it. We are going to expand *Salsa* into the home market.

Do you have to go knocking on doors to get funding to produce programs?

Yes, we do. Let me use Salsa as an example. We have spent our own dollars, a large portion of my budget this year on Salsa. Now, we want to do some things with Salsa. There is definitely a product line around Salsa, we feel. We want to market it. When you start doing posters and advertising and selling it to PBS, which would not be necessarily difficult for us, or to a cable company, you have to put together all kinds of materials. The meeting I was just involved in was about Salsa. We are having a formal evaluation done for Salsa by Emory. That costs. Those costs, I am hoping to get from an underwriter. So knocking on doors for an

underwriter is important right now. I want to go to a Coke or to a Taco Bell or to somebody who wants to underwrite Salsa so that their name is on the product. So that does mean knocking on doors.

I have a civics series, the American Ideals that is in the planning stage. We will produce the first program, then we will do a pilot across the country, and then hope for underwriting. So, I may not be able to go forward with it unless I can knock on someone's door that wants to underwrite it. My budget does not allow for everything that I would like to do. It's terrible. I would like to do so much more.

Where do the ideas come from for a program such as Salsa or American Ideals? Do they come from you?

My staff would joke with me and say that they are going to give me a bumper sticker that reads "Joey, just say no." A lot of it comes out of my head because I have been doing this for an awfully long time. The idea for Salsa came from a whole host of people. We were given some money to look into the feasibility of delivering a foreign language program to a large audience. We didn't know if we were going to do Spanish or another language or what grade level. We used our money, which was very little at that time, to get a national task force together. This is the approach that I have always used – to get a national task force together. That took most of our money. I used that group to focus on what could be taught by television because that is the underlying thing that we must always keep in mind because we can not conquer the world with this medium. It is a question of what we can do best with this medium. Once we knew that it was Spanish and once we knew we should start with the little kids and work forward, then a lot of things happened. I think what I know how to do best is how to bring the right people together. We brought foreign language, early childhood, and producers around the table and that's how Salsa grew. There were some things that I wanted in that program that intuitively just work like Salsa himself. I wanted a character that was consistent throughout the series that the kids would always look for. The idea for the salamander to represent the program evolved. I think this is why the process is so crazy. I started with a buffalo, don't ask me why. But, I kept saying I can

see this buffalo going across the screen, but it ended up being a salamander. And that takes weeks and hours and months of just working it out.

The idea for American Ideals came after Georgia Stories. Georgia Stories has been such a success, and if I had to take credit for anything, I would like to take credit for Georgia Stories. Our producer was so good and we were looking for another vehicle, so we sat down with Glen Blankenship from the Department of Education and said if there was something that we could do for the social studies community, what would be the highest on your list of priorities? Glen works with us all the time and knows what a television product can do versus print and he said probably civics. Again, we brought together a group of users and experts in the field and said here we are and we want to do something in this area. We want to use this storytelling approach that we used with Georgia Stories because of its success. What should it be? And American Ideals has grown out of that committee. That's how Georgia Stories came about – I just had an idea that we developed

Now we are working on something that I literally dreamed about one night that I just thought we should do. That's our early childhood network where we are trying to bring in and deliver out all the resources that we can find that are free for parents and caregivers to young children whether they be at home or in the daycare center setting, whether we do training for the DHR and the Office Of School Readiness For Prekindergarten. There are hundreds and hundreds of hours of training that those people have to take. Why not do it by television? There is a whole bunch of training that can be done that way. I live in Americus and I know how some of those mountain people get up in the hollers as they call it. The real source of information for these people is the television set. That sort of comes before any other thing and studies tell us that the number one piece of technology in the home is the television set. Second is the VCR and then you go from there. So, my reasoning is why would we let that resource, when we know how to do it, go to waste? So, programming ideas, they just come.

Georgia Stories was the very first program series we did at PeachStar. I had been in the Department of Education and listened for years to the social studies people (and I am a social studies teacher by training) say that there were never enough resources in the area of social studies. There had always been this need for Georgia history and we kept sending this across the street to the Georgia legislature and could never get it funded. But, we did not have to line item

our budget here at PeachStar, and so it seemed like I had died and gone to heaven. Here, I had a budget for whatever I felt was the thing that we needed to do the most. So, obviously Georgia history came to mind immediately, but more importantly it was politically appropriate to do. You can sell an idea if you can get close to something that someone understands. We felt that if we could show the legislature one of the stories from Georgia Stories that was in their home environment, their part of the state, then they would be more interested in looking at funding for them. It was not only fitting a curriculum need, but also fitting a local interest. We have been very successful with it. We think we have hit just as big a need in the 4th grade. We see it used as much in the 4th grade, well maybe not as much, but certainly a lot.

You mentioned SERC, the Satellite Education Resource Consortium. Is that being used in the schools?

Yes, it is. Certainly not as it once was. We pay the membership to SERC at the state level. Where in some states, schools can pay individually, but we pay that at the state level. And then they will have a different requirement depending on the course as to how much it is per student. They do have to pay.

If a school needed an advanced class in calculus would they use SERC?

That would probably be where we would direct them to SERC or another provider. We are not wedded to SERC. We collaborate with a lot of different groups and if SERC did not have an advanced class in calculus, Oklahoma might have a calculus class or some other provider in the country might have a calculus. SERC was the only game in town for a while and now there are just an awful lot of providers. We would direct them to that since we do not produce anything like that.

So, if a school had a particular need they could call you and you would try to find programming to fit their needs?

Yes, we would certainly give them some information about who has those kinds of programs. I don't know if good or bad, that would depend on the teacher and previewing and that sort of thing. With Irassahai, our Japanese course, we charge a fee. We have chosen not to put our courses with any other providers and let them market it for us. We market our own programs. We do the enrolling here for Irassahai and they pay the fee to us per student. Out of state schools pay $450 per year, per child. In Georgia, they pay $350 per student, per year. They get not only the 132 television programs that make up Japanese I and II, but also the text, access to the Web site, and most important and most expensive for us, they get an audio interaction course. So twice a week, they are on the phone with native speakers for twenty minutes. One teacher for five students, that's what they are paying for.

Do you have any statistics on usage? The article in Page One magazine mentioned that when you were down in January, you received over 7,500 phone calls.

That's right. We do have that data. We do have a study that was done by Beth Shapiro last year. It was not on numbers. It was a, "Do you know about PeachStar?"; "Do you use PeachStar?" kind of study. It was a random sample telephone survey. We are right now involved in the design of an evaluation instrument that will be administered from the University of Georgia. We will have the results in July. It is a formal evaluation of the use of PeachStar. But, it is not available yet.

Who is doing that at the University of Georgia?

Larry Gess and the Carl Vinson Institute of Government. It will be done in July. It is being done for the legislature. The instrument goes out to schools April 6 [1998]. I don't know which schools will get what. It may be a random sample. There is another person, Larry Hepburn that is actually doing the instrument.

PeachStar is not being utilized as it should, particularly in the Metro systems. I would love to see someone do a study such as yours in McDuffie County, as an example, where they just rely on us for so much and for so many resources. We have multiple channels now, and they call and they want us to rebroadcast programs. They just use it as it was designed to be used. And I think it is because they have so little money to purchase some of the things the bigger systems have. It is a very valuable resource to them.

It takes someone who champions us for it to happen in certain situations. This is happening in Gwinnett County just because Anne Hale [Craft] knows us. Anne and Sandy Glass have been friends of ours for a long time. Some of those people carried over from the Department of Education and there aren't many people that were with the department that are still there. I don't know of anybody from that media division who is still working actively in anything other than Clara Keith and me. I think everybody has gone different routes. I don't know where all those people ended up. Some retired and Nancy Pacesinger passed away. So, some of our friends, if you will, have sort of carried along with us and know about us just because they follow us personally and then the department has been in somewhat of a turmoil the last few years. But, there are some people in the department who are sort of champions of us. Bailey Mitchell, for example, who was Clara's boss, is now in Forsyth County and there is a big use of PeachStar in Forsyth County just because Bailey is there. Because Sandy knows us and because Mary Lou Armstrong has been a friend of ours forever in Cobb County, PeachStar is used in Forsyth County. So we have people that champion us. But, in large school systems like DeKalb, Gwinnett, Cobb and so forth, it is hard to get to every school and have someone champion us. It is easier to make a bigger issue of PeachStar in counties such as McDuffie or Evans that have only two or three schools. But, distance learning was designed for rural areas and I think primary statistics would bear it out that that is where its greatest use is.

But, the programs that you offer are short. They are 20 or 30 minutes long and they are ideal for classroom use.

They are ideal for a class. I think that there are just so many more resources in the wealthier counties to fill that gap. You would be absolutely amazed at how much it is used by some counties. It's amazing to me that they call every day and want something rebroadcast.

They have gotten sophisticated about satellite delivered programming. And they will call and say "I know you can't deliver this on 410, but can you put it on 420." It is just amazing to me because it was not a part of the school setting four years ago. For all of the detractors of satellite delivered programming, it has to find the time and the place and you don't introduce something brand new like that into a setting and expect 100% use. That won't happen.

People still have trouble with the difference between PeachStar and GPTV. This is a little confusing to people. Its difficult for people to grasp because they are so used to GPTV which is fine. If they know GPTV, they will find us eventually. We [PeachStar] produce more than GPTV does as far as the number of programs we turn out. There are a whole lot of people in the Atlanta area that do not know that we have a state radio network either because our signal is not strong in Atlanta. There are people that live by Peach State Public Radio in other areas of the state. So, we are now beginning on GPTV to show Georgia Broadcasting as part of our station identification with the three entities under it. So, there is an education process going on. But, often I see articles that just talk about GPTV. Our cards, our stationary, everything is Georgia Public Broadcasting now for all of us, with the identifying part underneath. So, it takes time to get that message across. As long as they know PeachStar in the schools, that is all I am concerned about right now.

Appendix D

Survey from Georgia Public Broadcasting
April 17, 1998

GEORGIA PUBLIC BROADCASTING

WERNER ROGERS
EXECUTIVE DIRECTOR

April 17, 1998

Dear Educator:

During the recent legislative session, the Georgia General Assembly provided funds for **Georgia Public Broadcasting** (GPB) to conduct an independent evaluation of our PeachStar Education programs and services. We are excited about this opportunity to partner with the highly respected **Carl Vinson Institute of Government at the University of Georgia** to take an in-depth look at our satellite-delivered educational programming as well as the other services GPB provides through the **PeachStar Education Services Division.**

The results from this evaluation will be critical in helping us make decisions about the types of programs and services we should be providing to better support student learning in Georgia's classrooms. We will use the evaluation in our planning for the future and to improve our customer service to educators, parents and the state. This initial survey will also give us essential baseline data to use in evaluating programs and services in the future.

It is extremely important that you complete the attached survey and return it in the envelope provided as soon as possible. Please follow the directions carefully because the validity of our results depends on the factors outlined in the instructions.

Thank you for taking your very valuable time to complete this survey. I certainly understand the many demands you have for your time and that it is hard to respond to every request. However, I assure you that we value your input and that it will be used to enhance and improve the services we provide to you and other educators.

If you have questions about the survey or the instructions, please feel free to contact Dr. Larry Hepburn at the University of Georgia. His number is (706) 542-2736. Again, we genuinely appreciate your time and input to this process. We will share the results in a future issue of the ***PeachStar Pipeline***.

Sincerely,

Werner Rogers

WR:nh
Attachment

GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION
GEORGIA PUBLIC TELEVISION PEACH STATE PUBLIC RADIO PEACHSTAR EDUCATION SERVICES
260 14TH STREET NW, ATLANTA, GEORGIA 30318-5360
404-685-2400

The University of Georgia

Carl Vinson Institute of Government

April 20, 1998

Dear Media Specialist:

The Carl Vinson Institute of Government is a public service unit of the University of Georgia. It has the unique mission of improving the quality of life for all Georgians by enhancing the ability of state and local governments to address current and emerging issues; applying knowledge, technologies, and practices to assist state and local officials in providing governmental services more effectively, responsively, efficiently and equitably; and providing applied and policy research, technical assistance, instructional programs, and publications that inform and assist state and local governments and promote an informed citizenry.

As Director Rogers indicates in his letter, we are responsible for the survey you were mailed. I assure you that your responses to this survey will be treated with the greatest confidence. No one other than Vinson Institute staff conducting the survey will ever see your response. Every document related to this survey that leaves our office will contain only aggregated data—data in which no single school or media specialist can be identified. Thus, you should feel free to be candid in your responses.

Returning your survey is very important. While approximately 1800 media specialists are being surveyed statewide, it is important to have a high response rate from each of eleven regions of the state. Thus, if you don't respond, we may not be able to determine the priority needs of your and similar schools in your region. We know from past experience that once the survey is put aside with the idea of completing it in a day or so, more often than not it never gets finished. Please take a few minutes and complete it now. To expedite your response, a pre-addressed, postage-paid envelope has been provided. Also, you can use either a black pen or pencil to mark the survey; **please completely shade the ovals**. Please do not staple or fold the survey sheets.

If we can assist you by answering your questions or addressing any concerns, please contact Dr. Larry Hepburn at 706-542-6201 (or e-mail *lheburn@igs.cviog.uga.edu*). Thank you for your assistance.

Sincerely,

Henry M. Huckaby

Henry M. Huckaby, Director

215

On the grounds of the historic Lucy Cobb Institute
201 N. Milledge Avenue • Athens, Georgia 30602-5482 • (706) 542-2736 • FAX (706) 542-9301
An Equal Opportunity/Affirmative Action Institution

Georgia Public Broadcasting PeachStar Educational Services
Media Specialist Survey

Media specialist completing this form (please print): _____

Telephone number: (____)_____ Date: _____

For multiple-choice responses, please completely shade appropriate ovals with dark pencil or a black pen. For short answer responses, please print legibly. If you have additional comments, check the box on the right and write them on a separate sheet.
Thank you very much for your help with this study! ☐

Section 1: Questions about your background with regard to being a media specialist

1. How much of your college preparation as a media specialist was devoted to the use of non-text media? (choose one)

○ none ○ less than 10 percent ○ 10-25 percent ○ 26-50 percent ○ more than 50 percent

2. To what extent did your college preparation encourage you to use non-print resources? (choose one)

○ never ○ rarely ○ sometimes ○ frequently ○ very frequently

3. Did you complete a teacher education program? (choose all that apply)

- ○ none
- ○ undergraduate
- ○ graduate

4. How much course work in curriculum and instruction have you had? (choose all that apply)

- ○ none
- ○ included in my teacher education
- ○ included in my media specialist preparation
- ○ took class(es) on my own

5. How long has it been since you completed your last library science and/or media specialist degree program? (choose one)

○ less than 1 year ○ 1-5 years ○ 6-10 years ○ 11-15 years ○ 16 or more years ○ no degree program

6. How much experience do you have as a school media specialist? (choose one)

○ less than 1 year ○ 1-5 years ○ 6-10 years ○ 11-15 years ○ 16 or more years

7. In your opinion, what are the three most important responsibilities of the media specialist? (choose three)

- ○ maintain media center holdings
- ○ assist students with resources
- ○ assist teachers with resource plans
- ○ help teachers with equipment
- ○ acquire media resources
- ○ provide expertise in use of media

8. In your opinion, what is the most appropriate school use of video resources? (choose one)

- ○ provide courses for which a regular teacher is not available
- ○ provide common core subject matter
- ○ enhance classroom presentations
- ○ supplement print media
- ○ reward good behavior or work
- ○ entertain students

9. In your opinion, which of the following are the two most important instructional support resources in assisting student learning? (choose two)

- ○ computer CD ROMS
- ○ computer software
- ○ Internet
- ○ print materials
- ○ video resources

Section 2 : Questions about your work with resources of PeachStar Satellite Network

1. Do you use PeachStar programming in your school? (choose one)

○ never ○ rarely ○ occasionally (less than once a week) ○ frequently (more than once a week)

Skip question 2 if you chose anything other than never in question 1; if you chose never, answer question 2 and then skip to Section 3 on the bottom of page 3.

2. What is the main reason you have never used PeachStar programming?(choose one)

○ no operational equipment for it ○ no time for it ○ no obvious benefit in using it
○ no training in using equipment ○ no interest in it ○ not familiar with it

3. Have you experienced difficulty in accessing PeachStar's signal this school year? (choose one)

○ never ○ rarely ○ frequently ○ most of the time ○ have not tried

4. What is the quality of the PeachStar signal received at your school now? (choose one)

○ blurry video and/or inaudible sound
○ adequate video and audio
○ clear video and audio
○ exceptionally clear video and audio
○ don't know

5. How much total time this year has the PeachStar satellite system been unavailable because of problems with your school's equipment? (choose one)

○ never ○ a few hours ○ a few days ○ many days ○ don't know

6. If you have problems using your receiving equipment, whom would you contact for help? (choose one)

○ the satellite help desk
○ PeachStar Office
○ a satellite company
○ school system technician
○ RESA technician
○ other (print who) _____
○ don't know

7. If you have equipment problems requiring a site visit, how quickly do you typically receive this help? (choose one)

○ same day ○ within two days ○ within three days ○ longer than three days ○ have not requested help

8. If you have equipment problems, how well does your technical support correct them on the first visit? (choose one)

○ always fixed on the first visit
○ fixed most of the time
○ usually requires two tries
○ can take three or more tries
○ rarely fixed
○ have not requested help

9. How responsive is the PeachStar staff when you call? (choose one)

○ not responsive at all
○ somewhat responsive
○ responsive
○ very responsive
○ have not called

10. How do you use the PeachStar *Program Guide*? (choose all that apply)

○ have one
○ read it
○ use it to learn about offerings
○ use to assist teachers in planning instruction
○ have not used it

11. How do you use Peach Star *Pipeline*? (choose all that apply)

○ receive it
○ read it
○ distribute it to teachers
○ use it to schedule taping or viewing
○ use it to assist teachers in planning instruction
○ have not used it

12. How do you use the PeachStar web site (http://www.gpb.org/pstar/)? (choose all that apply)

○ check for new programs and services offered
○ look up descriptions of K-12 programs
○ find staff development opportunities
○ schedule taping or viewing of programs
○ find program-related links on the Web
○ give feedback to PeachStar
○ have not used it

Section 2 (continues):

13. How familiar are you with PeachStar programming? (choose one)

- ○ not familiar
- ○ slightly familiar
- ○ somewhat familiar
- ○ familiar
- ○ thoroughly familiar

14. How skillful do you feel you are with regard to utilizing PeachStar programs? (choose one)

- ○ unskillful
- ○ not skillful enough
- ○ skillful enough
- ○ highly skillful

15. How much time have you worked <u>on your own</u> to prepare yourself in the use of PeachStar programs and services? (choose one)

- ○ none
- ○ 1 to 3 hours
- ○ 4-10 hours
- ○ 11-25 hours
- ○ 26-50 hours
- ○ more than 50 hours

16. How much are you encouraged by the school administration to participate in additional PeachStar training opportunities? (choose one)

- ○ not encouraged
- ○ seldom encouraged
- ○ regularly encouraged
- ○ strongly encouraged

17. From which of the following sources have you gotten training in the use of PeachStar? (choose all that apply)

- ○ college/university
- ○ PeachStar broadcasts and materials
- ○ RESA
- ○ technology center
- ○ school system
- ○ colleagues
- ○ no training

18. How many workshops on PeachStar programs and services have you attended? (choose one)

- ○ none
- ○ one
- ○ two
- ○ three
- ○ four or more

19. How useful has the training you've received been in acquiring knowledge and skills needed to utilize PeachStar programming and services? (choose one)

- ○ useless
- ○ barely useful
- ○ useful
- ○ very useful
- ○ no training received

20. What percent of your time is given to helping teachers and students use PeachStar? (choose one)

- ○ none
- ○ up to 10 percent
- ○ 11-20 percent
- ○ 21-35 percent
- ○ 36-50 percent
- ○ more than 50 percent

21. How competent do you feel you are in helping teachers use PeachStar programs and services? (choose one)

- ○ not competent
- ○ barely competent
- ○ somewhat competent
- ○ competent
- ○ highly competent

22. Which of the following describes the work you do with PeachStar? (choose all that apply)

- ○ operate equipment
- ○ help teachers use equipment
- ○ identify and access programs
- ○ record and distribute programs
- ○ inform teachers about programming and services
- ○ help teachers in planning
- ○ help students use programs
- ○ evaluate programs
- ○ have not worked with it

Section 3: Questions about how teachers in your school use PeachStar

1. How do teachers in your school typically find out what PeachStar programming is available? (choose all that apply)

- ○ from media specialist
- ○ from other teachers
- ○ from Program Guide
- ○ from Pipeline
- ○ from PeachStar Website
- ○ they have not tried to find out

Subsection dealing with grades Pre K-2 (skip this subsection if none of these grades are in your school)

2. What percent of grade Pre K-2 teachers in your school typically use PeachStar this year?

Frequently (typically at least one a week) (choose one)

○ none ○ 1-10 percent ○ 11-25 percent ○ 26-50 percent ○ 51-75 percent ○ 76-100 percent

Occasionally (typically less than once a week) (choose one)

○ none ○ 1-10 percent ○ 11-25 percent ○ 26-50 percent ○ 51-75 percent ○ 76-100 percent

3. If PeachStar programming is used in grades Pre K-2, which of the following subjects is most often used? (choose one)

○ arts/humanities
○ foreign language
○ health/safety
○ language arts/English
○ mathematics
○ music
○ science
○ social studies

4. How many times have grade Pre K-2 teachers in your school used "live" programs (or electronic field trips) such as *Live from Mars* and *Wild Wings: Heading South*? (choose one)

○ zero ○ one ○ two ○ three ○ four or more ○ don't know

5. To what extent have grade Pre K-2 teachers in your school used the instructional television service, open air broadcast 1 - 3 pm, Monday to Friday, on GPTV? (choose one)

○ never ○ rarely ○ occasionally ○ frequently

Subsection dealing with grades 3-5 (skip this subsection if none of these grades are in your school)

6. What percent of grade 3-5 teachers in your school typically use PeachStar this year?

Frequently (typically at least once a week) (choose one)

○ none ○ 1-10 percent ○ 11-25 percent ○ 26-50 percent ○ 51-75 percent ○ 76-100 percent

Occasionally (typically less than once a week) (choose one)

○ none ○ 1-10 percent ○ 11-25 percent ○ 26-50 percent ○ 51-75 percent ○ 76-100 percent

7. If PeachStar programming is used in grades 3-5, which of the following subjects is most often used? (choose one)

○ arts/humanities
○ foreign language
○ health/safety
○ language arts/English
○ mathematics
○ music
○ science
○ social studies

8. How many times have grade 3-5 teachers in your school used "live" programs (or electronic field trips) such as *Live from Mars* and *Wild Wings: Heading South*? (choose one)

○ zero ○ one ○ two ○ three ○ four or more ○ don't know

9. To what extent have grade 3-5 teachers in your school used the instructional television service, open air broadcast 1 - 3 pm, Monday to Friday, on GPTV? (choose one)

○ never ○ rarely ○ occasionally ○ frequently

Subsection dealing with grades 6-8 (skip this subsection if none of these grades are in your school)

10. What percent of grade 6-8 teachers in your school typically use PeachStar this year?

Frequently (typically at least once a week) (choose one)

○ none ○ 1-10 ○ 11-25 ○ 26-50 ○ 51-75 ○ 76-100

Occasionally (typically less than once a week) (choose one)

○ none ○ 1-10 ○ 11-25 ○ 26-50 ○ 51-75 ○ 76-100

11. If PeachStar programming is used in grades 6-8, which of the following subjects is most often used? (choose one)

- ○ arts/humanities
- ○ career planning/vocational
- ○ foreign language
- ○ health/safety
- ○ language arts/English
- ○ mathematics
- ○ music
- ○ science
- ○ social studies

12. How many times have grade 6-8 teachers in your school used "live" programs (or electronic field trips) such as *Live from Mars* and *Wild Wings: Heading South*? (choose one)

○ zero ○ one ○ two ○ three ○ four or more ○ don't know

13. To what extent have grade 6-8 teachers in your school used the instructional television service, open air broadcast 1 - 3 pm, Monday to Friday, on GPTV? (choose one)

○ never ○ rarely ○ occasionally ○ frequently

Subsection dealing with grades 9-12 (skip this subsection if none of these grades are in your school)

14. What percent of grade 9-12 teachers in your school typically use PeachStar this year?

Frequently (typically at least once a week) (choose one)

○ none ○ 1-10 ○ 11-25 ○ 26-50 ○ 51-75 ○ 76-100

Occasionally (typically less than once a week) (choose one)

○ none ○ 1-10 ○ 11-25 ○ 26-50 ○ 51-75 ○ 76-100

15. If PeachStar programming is used in grades 9-12, which of the following subjects is most often used? (choose one)

- ○ arts/humanities
- ○ career planning/vocational
- ○ foreign language
- ○ health/safety
- ○ language arts/English
- ○ mathematics
- ○ music
- ○ science
- ○ social studies

16. How many times have grade 9-12 teachers in your school used "live" programs (or electronic field trips) such as *Live from Mars* and *Wild Wings: Heading South*? (choose one)

○ zero ○ one ○ two ○ three ○ four or more ○ don't know

17. To what extent have grade 9-12 teachers in your school used the instructional television service, open air broadcast 1 - 3 pm, Monday or Friday, on GPTV? (choose one)

○ never ○ rarely ○ occasionally ○ frequently

All media specialists should complete the remaining questions:

18. In what subject area do teachers have the greatest need for more video programming? (choose one)

- arts/humanities
- career planning/vocational
- foreign language
- health/safety
- language arts/English
- mathematics
- music
- science
- social studies

19. In what subject areas do teachers have the second greatest need for more video programming? (choose one)

- arts/humanities
- career planning/vocational
- foreign language
- health/safety
- language arts/English
- mathematics
- music
- science
- social studies

20. How do teachers commonly use PeachStar programs? (choose all that apply)

- provide primary instruction for complete course
- provide course sequence and content
- design instruction
- supplement basic subject matter
- individualized instruction
- reward good behavior or work
- entertain students
- participate in staff development
- do not use

21. What is the general opinion of teachers on whether or not video resources from PeachStar are appropriate for use in their teaching? (choose one)

- strongly negative
- negative
- mixed pro and con
- positive
- strongly positive
- I have no idea

22. How satisfied are teachers with the content of PeachStar programming? (choose one)

- strongly negative
- negative
- mixed pro and con
- positive
- strongly positive
- I have no idea

23. What is the general opinion of teachers regarding the extent to which PeachStar programming meets the learning needs of students? (choose one)

- never meets needs
- seldom meets needs
- meets some of the needs
- generally meets needs
- always meets needs
- I have no idea

24. Which of the following reasons have teachers in your school given for not using PeachStar programming? (choose all that apply)

- not familiar with program content
- topics don't match curriculum
- content doesn't fit maturity of students
- program technical quality is low
- see little educational value in non-print media
- video doesn't fit teaching style
- technical difficulties in using equipment
- too many things competing for instructional time

25. Which of the following has been important in positively influencing the extent to which PeachStar programming is used in your school? (choose all that apply)

- school physical facilities and equipment
- local school board policy
- level of support from central office
- level of support from principal
- teacher preferences
- parent attitudes
- don't know
- none apply

26. Which of the following has been important in negatively influencing the extent to which PeachStar programming is used in your school? (choose all that apply)

- school physical facilities and equipment
- local school board policy
- level of support from central office
- level of support from principal
- teacher preferences
- parent attitudes
- don't know
- none apply

27. Does your principal tend to support use of print materials (e.g., textbooks and library books) or does she/he tend to support use of non-print resources? (e.g., video and computer applications)? (choose one)

- print materials
- non-print resources
- both print and non-print equally
- I have no idea

28. How have PeachStar programs and services affected how teachers in your school teach? (choose all that apply)

- use a richer supply of information
- have more current information for students
- assign more small group and individual projects
- try a wider variety of teaching methods
- more easily motivate learning
- stimulate teachers enthusiasm
- don't know

29. How have PeachStar programs and services affected how students in your school learn? (choose all that apply)

- better able to learn independently
- greater skill in finding and using information
- increased motivation
- accelerated mastery of basic skills
- increased time on task
- widened interest in subjects
- more positive attitude and behavior
- don't know

30. How satisfied are you with the quality of PeachStar staff development programming (e.g., *Beyond Chalk: Teaching with Technology*, *Galaxy: Science Professional Development*, and *Satellite Town Meeting*)? (choose one)

- strongly negative
- negative
- mixed pro and con
- positive
- strongly positive
- no opinion